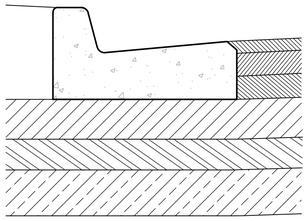
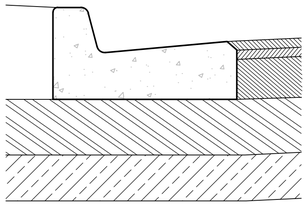
NOTES:

1. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PLANS APPROVED BY COUNCIL, COUNCIL STANDARDS & SPECIFICATIONS, CURRENT VPA AND THE GROWTH AREA AUTHORITY - GAA ENGINEERING DESIGN AND CONSTRUCTION MANUAL (EDCM) STANDARD DRAWINGS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE GROUP MANAGER - DEVELOPMENT AND TECHNICAL SERVICES.
2. BEFORE COMMENCING WORK LOCATE EXISTING SERVICES AND NOTIFY APPROPRIATE AUTHORITIES IN PARTICULAR THOSE NOMINATED IN THE SPECIFICATION. COUNCIL TO BE NOTIFIED SEVEN DAYS PRIOR TO COMMENCEMENT OF WORKS.
3. THE CONTRACTOR SHALL OBSERVE AND FULFILL ALL CURRENT OH&S LEGISLATION, VICTORIAN WORKSAFE AUTHORITY AND OTHER AUTHORITY GUIDELINES AND REQUIREMENTS AT ALL TIMES.
4. ALL TRENCHING SHALL COMPLY WITH THE CODE OF PRACTICE FOR TRENCHES. BEFORE COMMENCING EXCAVATION ON ANY TRENCH GREATER THAN 1.5 METRES IN DEPTH, A NOTICE IS TO BE SENT TO THE VICTORIAN WORKCOVER AUTHORITY IN ACCORDANCE WITH THE CODE. ALSO OBSERVE THE PROVISIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT 2004 AND ITS RELEVANT CODES OF PRACTICE.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE CONSTRUCTION AREA IN A SAFE CONDITION AND TO BE SURE THAT ADEQUATE BARRIERS, LIGHTS AND SIGNS ARE INSTALLED AND MAINTAINED WHERE NECESSARY. ALL SIGNS AND TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH AS 1742.1, 2 AND 3 AND AS DIRECTED BY THE SUPERINTENDENT.LINEMARKING SHALL BE IN ACCORDANCE WITH VICROADS REQUIREMENT WITH LATERAL WORKS AND ARROWS BEING COLD APPLIED PLASTIC TROWELLED INTO PLACE (MATERIAL DEGADUR OR PLASTELINE) AND LONGITUDINAL LINES BEING EXTRUDED THERMOPLASTIC MATERIAL (VICROADS SPECIFICATION - SEE SECTION 710 AND 722)
6. PRIOR TO THE COMMENCEMENT OF WORKS THE CONTRACTOR IS TO HAVE AN ENVIRONMENTAL MANAGEMENT PLAN (EMP) THAT SATISFIES CURRENT EPA AND COUNCIL REQUIREMENTS AND A TRAFFIC MANAGEMENT PLAN (TMP) TO SATISFY COUNCIL AND ROAD AUTHORITY REQUIREMENTS. THE REQUIREMENTS OF THE EMP AND TMP ARE TO BE MAINTAINED THROUGHOUT THE COURSE OF THE WORK.
7. THE CONTRACTOR IS TO SUPPLY AND ESTABLISH APPROVED MEASURES TO CONTROL STORMWATER DISCHARGES DURING CONSTRUCTION. REFER DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT PUBLICATIONS "GUIDELINES FOR MINIMISING SOIL EROSION AND SEDIMENTATION FROM CONSTRUCTION SITES" AND "CONTROL OF SOIL EROSION FOR CONSTRUCTION SITES". A SITE MANAGEMENT PLAN IS TO BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCEMENT ON SITE.
8. GRADE LOTS TO HAVE A UNIFORM SLOPE BETWEEN STATED LEVELS AND LEAVE CLEAN TO APPROVAL. DO NOT REMOVE TOPSOIL FROM SITE. ALL LOTS TO BE GRADED TO A MINIMUM FALL OF 1 in 150. ON COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL RUBBISH AND SPOIL FROM THE SITE.
9. THE REMOVAL OR RETENTION OF ANY EXISTING TREES MUST BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN, OR ELSE APPROVAL WILL BE REQUIRED FROM THE ENGINEER.
10. DRAINAGE AND PITS TO BE SET OUT FROM OFFSETS SHOWN RATHER THAN FROM PIPE CENTRELINE CHAINAGES. DRAINS IN EASEMENTS TO BE 1.00m OFFSET FROM ALLOTMENT TITLE BOUNDARY UNLESS OTHERWISE SHOWN. EASEMENTS TO BE 2.00m WIDE UNLESS OTHERWISE SHOWN. DRAINS IN ROAD RESERVES TO BE OFFSET AS SHOWN ON VPA AND THE GROWTH AREA AUTHORITY - GAA ENGINEERING DESIGN AND CONSTRUCTION MANUAL (EDCM). DRAINAGE PITS TO BE AS SCHEDULED AND TO ACCORD WITH MPA AND THE GROWTH AREA AUTHORITY - GAA ENGINEERING DESIGN AND CONSTRUCTION MANUAL (EDCM) STANDARDS AS APPROPRIATE.
11. DRAINAGE PIPES TO BE A MINIMUM CLASS '2' REINFORCED CONCRETE TO AS 4058 SPECIFICATIONS, BEDDED, & BACKFILLED IN ACCORDANCE WITH MPA AND THE GROWTH AREA AUTHORITY - GAA ENGINEERING DESIGN AND CONSTRUCTION MANUAL (EDCM) AND THE FOLLOWING: ALL PIPES RUBBER RING JOINTED UNLESS OTHERWISE SHOWN. PIPES BENEATH ROAD PAVEMENTS, FOOTPATH AND VEHICLE CROSSINGS TO BE BACKFILLED WITH 20mm CLASS 2 FCR COMPACTED AS SPECIFIED.
12. CUT AND FILL BATTERS ASSOCIATED WITH ROADWORKS TO BE COVERED WITH TOPSOIL, SEEDED WITH GRASS SEED AND STABILISED TO THE SATISFACTION OF THE ENGINEER. CUT/RISING FILL 1 in 6 FILL 1 in 6. VEHICLE CROSSINGS TO ALLOTMENTS ADJACENT TO CUT BATTERS EXCEEDING 1m IN HEIGHT TO HAVE ACCESS RAMPS TO PROPERTY OWNER'S AND COUNCIL SATISFACTION. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND TOPSOIL REPLACED TO OBTAIN FINAL FILL LEVELS AS STATED. FILLING WORKS & FILL COMPACTION TO CONFORM TO AS 1289 5.1.1 - 1993 AND ANY REVISIONS THERETO. ALLOTMENTS & ROAD RESERVES - 95% S.C.T.D - UNDER PAVEMENT - TOP 450mm 100% SCTD, OTHERWISE 95% MMDD. REFER TO AS 3798-1996 - GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. ALL FILL MATERIAL MUST CONFORM TO THE EPA FILL MATERIAL GUIDELINES AND TO BE APPROVED BY THE ENGINNER PRIOR TO CARTING TO SITE. COMPACTION TESTING TO BE CARRIED OUT IN ACCORDANCE WITH STANDARDS BY NATA REGISTERED LABORATORY AND RESULTS SUBMITTED TO THE SUPERINTENDANT.
13. PROVIDE EACH ALLOTMENT WITH A 100mm DIAMETER CLASS SN10 UPVC HOUSE DRAIN (ROAD DRAIN) OR PROPERTY INLET (TO EASEMENT DRAIN) AS APPROPRIATE. HOUSE DRAIN SHOWN THUS ——— TO BE PLACED 6.00m FROM THE LOW CORNER OF LOT UNLESS OTHERWISE NOTED, ROAD DRAIN EXTENDING 500mm BEYOND TITLE BOUNDARY.
    PROPERTY CONNECTION SHOWN THUS ⊥ TO HAVE PROPERTY INLET GULLY OFFSET 1m FROM LOW CORNER OF LOT EXCEPT WHERE PRECLUDED BY PITS. INVERT LEVEL OF ALL PROPERTY INLETS TO BE MIN 0.5m BELOW FINISHED SURFACE LEVEL, UNLESS OTHERWISE SHOWN .
14. 100mm SLOTTED POLYETHYLENE SUBSOIL DRAINS TO BE PLACED BEHIND ALL KERB AND CHANNEL, CONCRETE EDGE STRIPS AND WHERE DIRECTED BY THE ENGINEER. USE CLASS 1000 FOR TRAFFIC AREAS, CLASS 400 OTHERWISE.
15. PROVIDE CONDUITS FOR UNDERGROUND SERVICES WHERE AND TO DETAILS SHOWN BEFORE PAVEMENT CONSTRUCTION. GAS AND WATER CONDUITS TO BE 50mm CLASS 12 UPVC TO AS 1477.CONDUITS TO EXTEND TO 1500mm BEHIND BACK OF KERB WITH THE GAS CONDUIT EXTENDED 300mm INTO THE ALLOTMENT BEING SERVICED AND 300mm PAST THE END OF OFF STREET PARKING BAYS.
16. EXISTING NATURAL AND MANMADE DEPRESSIONS TO BE EXCAVATED TO A FIRM BASE AND BACKFILLED AS SPECIFIED. CONSULTING ENGINEER TO BE NOTIFIED WHEN EXCAVATED TO A FIRM BASE. NO FILLING IS TO BE PLACED PRIOR TO SITES BEING INSPECTED AND LEVELS TAKEN.
17. STREET SIGNS SHOWN THUS ⊢ TO BE MITCHELL SHIRE COUNCIL STANDARD. OTHER SIGNS TO BE LOCATED TO THE APPROVAL OF COUNCILS SUPERINTENDENT OF WORKS. SIGNS, MARKINGS AND DELINEATORS TO BE INSTALLED AS APPLICABLE IN ACCORDANCE WITH AS 1742.2 (ALSO REFER NOTE 4 ABOVE)
18. PSM SHOWN THUS ⊥ TO BE PROVIDED WITHIN FOOTPATH AREA AS SHOWN ON LAYOUT PLAN AND TO BE HIGH STABILITY TYPE
19. DIMENSIONS AND LEVELS ARE IN METRES, LEVELS TO AUSTRALIAN HEIGHT DATUM.
20. ALL SITEWORKS AND DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH EPA REQUIREMENTS (REFER EPA PUBLICATION "ENVIRONMENTAL GUIDELINES FOR MAJOR CONSTRUCTION SITES").
    ON-SITE TREATMENT OF SITE WATER MAY BE REQUIRED PRIOR TO ANY DISCHARGE TO THE STORMWATER DRAINAGE SYSTEM.
21. PROVIDE TACTILE PAVEMENT IN ACCORDANCE WITH DDA STANDARD. (REF. VIC ROADS STD 2031)
22. ROAD PAVEMENT TO COMPRISE: AS SHOWN BELOW



MURRAY STREET

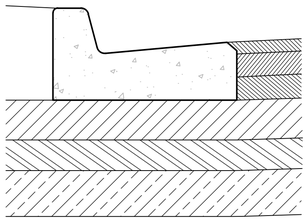
PAVEMENT PROFILE COMPOSITION		LAYER THICKNESS	PAVEMENT DEPTH
(1) WEARING COURSE	40mm SIZE 14mm TYPE N CLASS C170 ASPHALT	40	40
(2) INTERMEDIATE COURSE	75mm SIZE 20 TYPE SI CLASS 320 ASPHALT	75	115
(3) BASE COURSE	75mm SIZE 20 TYPE SI CLASS 320 ASPHALT	75	190
(4) INTER LAYER	BITUMINOUS PRIME		
(5) BASE	130mm SIZE 20mm CEMENT TREATED CRUSHED ROCK (MIN 3% CEMENT, CLASS 3) COMPACTED TO NOT LESS THAN 98% OF MODIFIED COMPACTION, AS 1289.5.2.1	130	320
(6) SUBBASE	100mm SIZE 20mm CLASS 4 CRUSHED ROCK COMPACTED TO NOT LESS THAN 98% OF MODIFIED COMPACTION, AS 1289.5.2.1	100	420
(7) CAPPING LAYER	150mm THICK SUITABLE CAPPING LAYER AS PER VICROADS/COUNCIL REQUIREMENTS, PERCENTAGE SWELL <1.5%, CBR>8%, COEFFICIENT OF PERMEABILITY k<1x10-9 m/s, COMPACTED TO A MIN. DENSITY OF 95% OF MODIFIED COMPACTION, AS1289.5.2.1.	150	570
570mm TOTAL MINIMUM INCLUDING ASPHALT			
(8) CONSTRUCTION LAYER/STABILISED SUBGRADE	150mm THICK SUITABLE CAPPING LAYER AS PER VICROADS/COUNCIL REQUIREMENTS, PERCENTAGE SWELL <1.5%, CBR>8%, COEFFICIENT OF PERMEABILITY k<1x10-9 m/s, COMPACTED TO A MIN. DENSITY OF 95% OF MODIFIED COMPACTION AS1289.5.2.1. **OR** STABILISE EXISTING SUBGRADE TO MINIMUM 150mm DEPTH WITH MINIMUM 3% LIME CONTENT (MINIMUM CBR>10%)	150	720
(9) SUBGRADE	MATERIAL AS FOUND (SILTY CLAY) COMPACTED TO A MIN. DENSITY RATIO 98% (STANDARD), AS1289.5.1.1.		



CYPRESS CIRCUIT& BRISTLECONE STREET

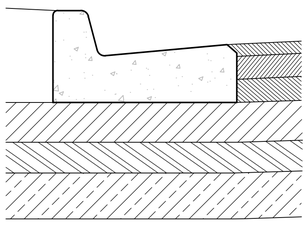
NOTES:
ALL OTHER DETAILS RELATING TO PAVEMENT EDGE / SUB-SURFACE DRAIN SHALL CONFORM TO 'EXPANSIVE SUBGRADE' DETAIL ON EDCM 202.

PAVEMENT PROFILE COMPOSITION		LAYER THICKNESS	PAVEMENT DEPTH
(1) WEARING COURSE	30mm SIZE 10mm TYPE I CLASS C170 ASPHALT	30	30
(2) BASE COURSE	30mm SIZE 10mm TYPE N CLASS C170 ASPHALT	30	60
(3) INTER LAYER	SIZE 10 SAMI OVER BITUMINOUS PRIME	-	-
(4) BASE	130mm SIZE 20mm CLASS 2 CRUSHED ROCK COMPACTED TO NOT LESS THAN 98% OF MODIFIED COMPACTION AS 1289.5.2.1	130	190
(5) SUBBASE	210mm SIZE 20mm CLASS 3 CRUSHED ROCK COMPACTED TO NOT LESS THAN 98% OF MODIFIED COMPACTION AS 1289.5.2.1	210	400
(6) CAPPING LAYER	150mm THICK SUITABLE CAPPING LAYER AS PER VICROADS/COUNCIL REQUIREMENTS, PERCENTAGE SWELL <1.5%, CBR>8%, COEFFICIENT OF PERMEABILITY k<1x10-9 m/s, COMPACTED TO A MIN. DENSITY OF 95% OF MODIFIED COMPACTION, AS1289.5.2.1.	150	550
550mm TOTAL MINIMUM INCLUDING ASPHALT			
(7) CONSTRUCTION LAYER/STABILISED SUBGRADE	150mm THICK SUITABLE CAPPING LAYER AS PER VICROADS/COUNCIL REQUIREMENTS, PERCENTAGE SWELL <1.5%, CBR>8%, COEFFICIENT OF PERMEABILITY k<1x10-9 m/s, COMPACTED TO A MIN. DENSITY OF 95% OF MODIFIED COMPACTION AS1289.5.2.1. **OR** STABILISE EXISTING SUBGRADE TO MINIMUM 150mm DEPTH WITH MINIMUM 3% LIME CONTENT (MINIMUM CBR>10%)	150	700
(8) SUBGRADE	SUBGRADE MATERIAL AS FOUND (SILTY CLAY) COMPACTED TO A MIN. DENSITY RATIO 98% (STANDARD), AS1289.5.1.1.		



AUSTRAL STREET

PAVEMENT PROFILE COMPOSITION		LAYER THICKNESS	PAVEMENT DEPTH
(1) WEARING COURSE	40mm SIZE 14mm TYPE V CLASS C320 ASPHALT	40	40
(2) INTERMEDIATE COURSE	75mm SIZE 20 TYPE SI CLASS 320 ASPHALT	75	115
(3) BASE COURSE	75mm SIZE 20 TYPE SI CLASS 320 ASPHALT	75	190
(4) INTER LAYER	BITUMINOUS PRIME		
(5) BASE	135mm SIZE 20mm CEMENT TREATED CRUSHED ROCK (MIN 3% CEMENT, CLASS 3) COMPACTED TO NOT LESS THAN 98% OF MODIFIED COMPACTION, AS 1289.5.2.1	135	325
(6) SUBBASE	100mm SIZE 20mm CLASS 4 CRUSHED ROCK COMPACTED TO NOT LESS THAN 98% OF MODIFIED COMPACTION, AS 1289.5.2.1	100	425
(7) CAPPING LAYER	150mm THICK SUITABLE CAPPING LAYER AS PER VICROADS/COUNCIL REQUIREMENTS, PERCENTAGE SWELL <1.5%, CBR>8%, COEFFICIENT OF PERMEABILITY k<1x10-9 m/s, COMPACTED TO A MIN. DENSITY OF 95% OF MODIFIED COMPACTION, AS1289.5.2.1.	150	575
575mm TOTAL MINIMUM INCLUDING ASPHALT			
(8) CONSTRUCTION LAYER/STABILISED SUBGRADE	150mm THICK SUITABLE CAPPING LAYER AS PER VICROADS/COUNCIL REQUIREMENTS, PERCENTAGE SWELL <1.5%, CBR>8%, COEFFICIENT OF PERMEABILITY k<1x10-9 m/s, COMPACTED TO A MIN. DENSITY OF 95% OF MODIFIED COMPACTION AS1289.5.2.1. **OR** STABILISE EXISTING SUBGRADE TO MINIMUM 150mm DEPTH WITH MINIMUM 3% LIME CONTENT (MINIMUM CBR>10%)	150	725
(9) SUBGRADE	MATERIAL AS FOUND (SILTY CLAY) COMPACTED TO A MIN. DENSITY RATIO 98% (STANDARD), AS1289.5.1.1.		



AUSTRAL ST - CYPRESS ST/BRISTLECONE ST ROUNDABOUT

PAVEMENT PROFILE COMPOSITION		LAYER THICKNESS	PAVEMENT DEPTH
(1) WEARING COURSE	30mm SIZE 10mm TYPE V CLASS C320 ASPHALT	30	30
(2) BASE COURSE	30mm SIZE 10mm TYPE N CLASS 170 ASPHALT	30	60
(3) INTER LAYER	SIZE 10 SAMI OVER BITUMINOUS PRIME	-	-
(4) BASE	130mm SIZE 20mm CLASS 2 CRUSHED ROCK COMPACTED TO NOT LESS THAN 98% OF MODIFIED COMPACTION, AS 1289.5.2.1	130	190
(5) UPPER SUBBASE	140mm SIZE 20mm CLASS 3 CRUSHED ROCK COMPACTED TO NOT LESS THAN 98% OF MODIFIED COMPACTION, AS 1289.5.2.1	140	330
(6) LOWER SUBBASE	120mm SIZE 20mm CLASS 4 CRUSHED ROCK COMPACTED TO NOT LESS THAN 98% OF MODIFIED COMPACTION, AS 1289.5.2.1	120	450
(7) CAPPING LAYER	150mm THICK SUITABLE CAPPING LAYER AS PER VICROADS/COUNCIL REQUIREMENTS, PERCENTAGE SWELL <1.5%, CBR>8%, COEFFICIENT OF PERMEABILITY k<1x10-9 m/s, COMPACTED TO A MIN. DENSITY OF 95% OF MODIFIED COMPACTION, AS1289.5.2.1.	150	600
600mm TOTAL MINIMUM INCLUDING ASPHALT			
(8) CONSTRUCTION LAYER/STABILISED SUBGRADE	150mm THICK SUITABLE CAPPING LAYER AS PER VICROADS/COUNCIL REQUIREMENTS, PERCENTAGE SWELL <1.5%, CBR>8%, COEFFICIENT OF PERMEABILITY k<1x10-9 m/s, COMPACTED TO A MIN. DENSITY OF 95% OF MODIFIED COMPACTION AS1289.5.2.1. **OR** STABILISE EXISTING SUBGRADE TO MINIMUM 150mm DEPTH WITH MINIMUM 3% LIME CONTENT (MINIMUM CBR>10%)	150	750
(9) SUBGRADE	MATERIAL AS FOUND (SILTY CLAY) COMPACTED TO A MIN. DENSITY RATIO 98% (STANDARD), AS1289.5.1.1.		

LOCALITY PLAN
N.T.S

DRAWING INDEX

SHEET NO.	DRAWING TITLE
5R1	GENERAL NOTES, LOCALITY PLAN AND DETAILS
5R2	DETAIL PLAN
5R3	LONGITUDINAL AND CROSS SECTIONS - 1 AUSTRAL STREET
5R4	CROSS SECTIONS - 2 AUSTRAL STREET
5R5	CROSS SECTIONS - 3 AUSTRAL STREET
5R6	LONGITUDINAL AND CROSS SECTIONS - 1 MURRAY STREET
5R7	CROSS SECTIONS - 2 MURRAY STREET
5R8	LONGITUDINAL AND CROSS SECTIONS - 1 CYPRESS CRESCENT - BRISTLECONE STREET
5R9	CROSS SECTIONS - 2 CYPRESS CRESCENT - BRISTLECONE STREET
5R10	INTERSECTION DETAILS AND KERB SET OUT - 1
5R11	INTERSECTION DETAILS AND KERB SET OUT - 2
5R12	INTERSECTION DETAILS AND KERB SET OUT - 3
5R13	DRAINAGE LONGITUDINAL SECTIONS - 1
5R14	DRAINAGE LONGITUDINAL SECTIONS - 2
5R15	DRAINAGE LONGITUDINAL SECTIONS - 3 AND PIT SCHEDULE
5R16	TEMPORARY RETARDING BASINS - DETAIL PLAN, LONGITUDINAL SECTIONS. DETAILS AND PIT SCHEDULE
5R17	SIGNAGE AND LINEMARKING PLAN

SERVICE AUTHORITY CONTACTS

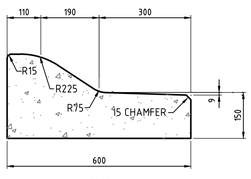
SERVICE	AUTHORITY	TELEPHONE
GAS RETICULATION	APA - GROUP	1800 085 628
WATER/SEWERS	YARRA VALLEY WATER	(03) 9872 1456
ELECTRICITY	AUSNET ELEC SERVICES	1800 088 208
TELECOMMUNICATION	TELSTRA	1800 653 935
TELECOMMUNICATION	NBN	1800 687 626
TELECOMMUNICATION	OPTICOMM	(03) 9024 9555

SERVICES SCHEDULE STAGE 5

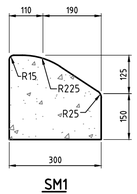
STREET NAME	GAS	ND-WATER	D-WATER	TELSTRA	ELECT.	SEWER	ROAD RESERVE
MURRAY STREET	2.10 W	2.85 W	3.60 W / EX10.70 E (VARIES) ×	1.85 E	2.50 E	1.00 E	30.18
AUSTRAL STREET	2.10 N	2.60 N	3.10 N	1.85 S	2.50 S	1.00 N	20.00
CYPRESS CRESCENT	2.10 E	2.60 E	3.10 E	1.85 W	2.50 W	1.00 W	16.00
BRISTLECONE STREET	2.10 W	2.60 W	3.10 W	1.85 E	2.50 E	1.00 E	16.00

× DENOTES EXISTING SERVICE EXACT LOCATION TO BE PROVEN ON SITE BY CONTRACTOR.
ALL OFFSETS ARE REFERENCED TO NEAREST BL.

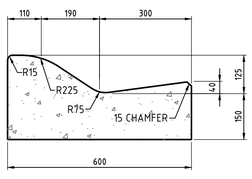
ROAD PAVEMENT DETAILS



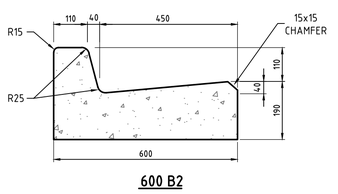
SM3



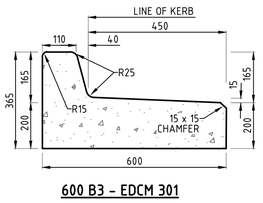
SM1



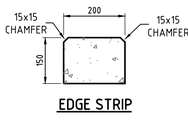
SM2



600 B2



600 B3 - EDCM 301



EDGE STRIP

PRELIMINARY PLAN ONLY
NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS NOT TO BE COPIED OR SCALED

VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site prior to commencing works. No guarantee is given that all existing services are shown.

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

REEDS CONSULTING
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www.reedsconsulting.com.au
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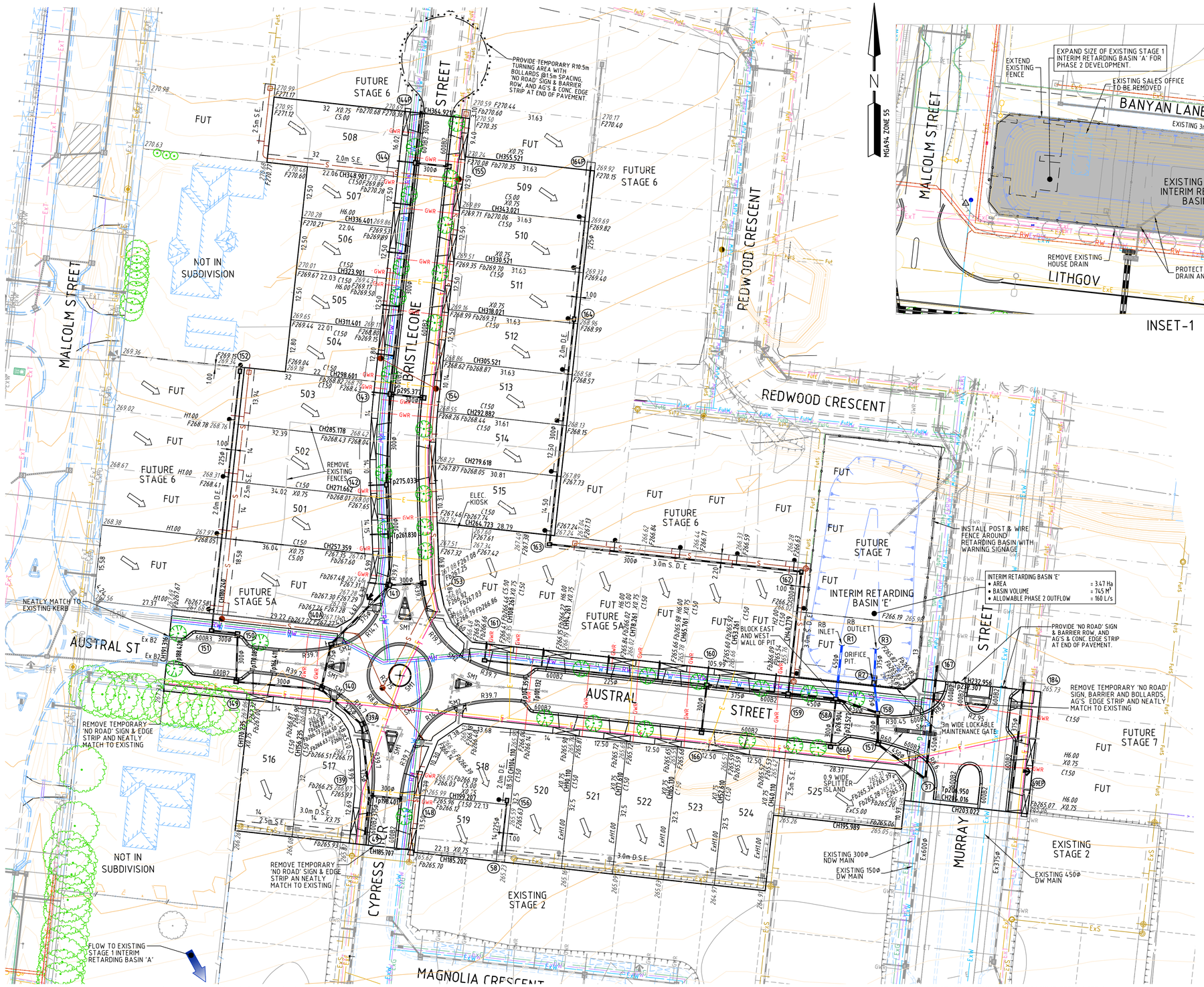
Lvl 6, 440 Elizabeth Street Melbourne Victoria 3000
p (03) 8660 3000

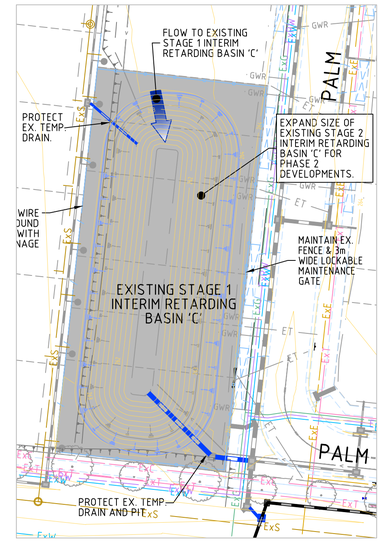
MITCHELL SHIRE COUNCIL
ARROWSMITH AND LITHGOW ST, BEVERIDGE
TIMBARRA ESTATE - STAGE 5
GENERAL NOTES, LOCALITY PLAN AND DETAILS

DRAWING No.	VERSION
5R1	A
REFERENCE	
23017E/5	
SHEET	
1 OF 17	

H:\23017\STAGE-5\CAD\DWG SET\ROAD AND DRAINAGE\23017_5R1.DWG



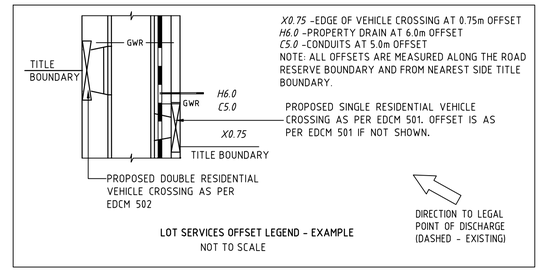
INSET-1



INSET-2

LEGEND

- TEMPORARY TURNING AREA INCLUDING BOLLARDS AND "NO ROAD" SIGN.
- PROPOSED GAS & WATER CONDUITS
- DIRECTION OF LEGAL POINT OF DISCHARGE
- OVERLAND FLOW PATH DIRECTION
- PROPOSED INTERIM RB DRAINS
- PROPOSED STREET TREES



X0.75 –EDGE OF VEHICLE CROSSING AT 0.75m OFFSET
H6.0 –PROPERTY DRAIN AT 6.0m OFFSET
C5.0 –CONDUITS AT 5.0m OFFSET
NOTE: ALL OFFSETS ARE MEASURED ALONG THE ROAD RESERVE BOUNDARY AND FROM NEAREST SIDE TITLE BOUNDARY.

PROPOSED SINGLE RESIDENTIAL VEHICLE CROSSING AS PER EDCM 501. OFFSET IS AS PER EDCM 501 IF NOT SHOWN.

LOT SERVICES OFFSET LEGEND - EXAMPLE
NOT TO SCALE

DIRECTION TO LEGAL POINT OF DISCHARGE (DASHED - EXISTING)

WARNING

BEWARE OF UNDERGROUND SERVICES

The locations of underground services are approximate only and their exact position should be proven on site prior to commencing works. No guarantee is given that all existing services are shown.

PRELIMINARY PLAN ONLY
NOT APPROVED FOR CONSTRUCTION

DETAIL PLAN

0 5 10 20
Scale 1:500 @ A1

PROPOSED TREES

TREES LOCATION SHOWN IS INDICATIVE ONLY.
LANDSCAPE PLANS TO PROVIDE STREETSCAPE WITH STREET TREES.

VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

LEGEND

DRAIN, PROPERTY INLET & PIT; EX DRAIN & PIT; HOUSE DRAIN; SEWER AND MAINTENANCE HOLE; EX SEWER AND MAINTENANCE HOLE; WATER MAIN; EX WATER MAIN, VALVE & HYDRANT; GAS MAIN; EX GAS MAIN, VALVE; COMMS SERVICES & PITS; EX COMMS SERVICES & PITS

RECYCLED WATER; EX RECYCLED WATER; ELECTRICAL U.G. SERVICES; EX ELECTRICAL U.G. SERVICES; ELECTRICAL SERVICE & PIT; EX ELECTRICAL ASSETS; EX ELECTRICAL OVERHEADS; GAS & WATER CONDUITS; TOP OF BATTER; TOE OF BATTER

FINISHED SURFACE AFTER CUTTING OR FILLING; TOP OF PROPOSED BATTER; PROPOSED PAVEMENT OR FOOTPATH SURFACE; EXISTING OR PROPOSED INVERT LEVEL OF PIPE OR OPEN DRAIN; TANGENT POINT; CHAINAGE; PSM; STREET SIGN; DRAINAGE PIT No.; TBM; EX FENCE; EX WALL OR BUILDING

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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LAND SURVEYING
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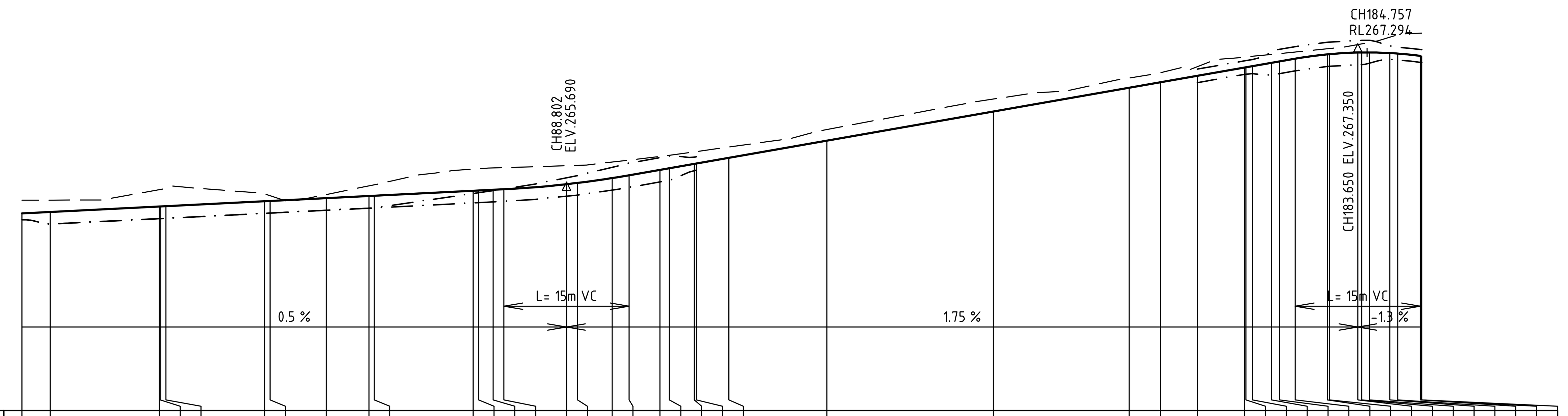
MITCHELL SHIRE COUNCIL
ARROWSMITH AND LITHGOW ST, BEVERIDGE
TIMBARRA ESTATE - STAGE 5
DETAIL PLAN

DRAWING No.	VERSION
5R2	A
REFERENCE	
23017E/5	
SHEET	
2 OF 17	

H:\23017\STAGE-5\CAD\DWG SET\ROAD AND DRAINAGE\23017E_5R2_10-12_17.DWG



VERTICAL GEOMETRY

HORIZONTAL GEOMETRY

DATUM RL263

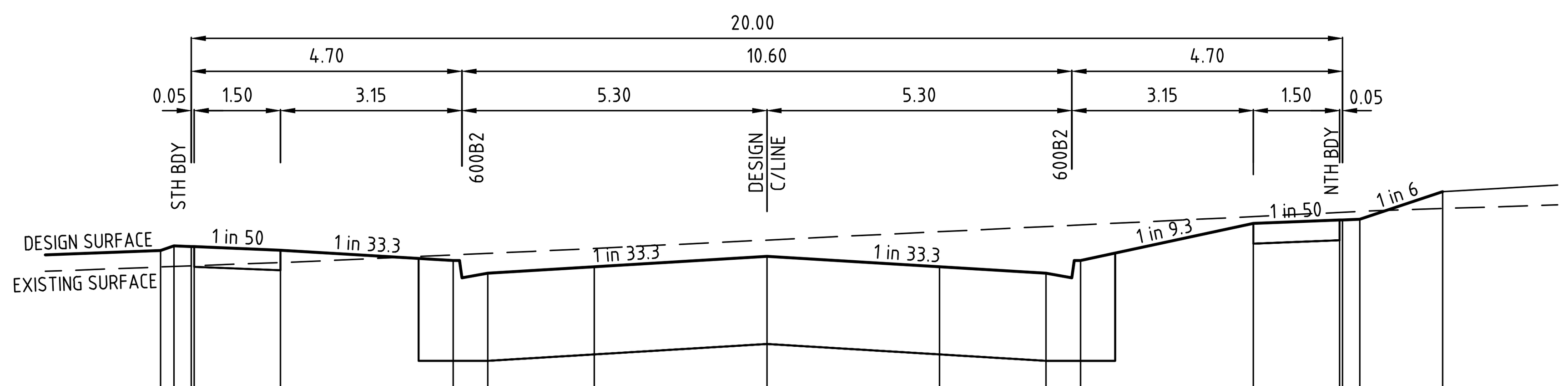
DESIGN CENTRELINE	265.364	265.380	265.446	265.446	265.450	265.509	265.512	265.546	265.571	265.575	265.634
LEFT LIP OF KERB	265.287	265.235	265.300	265.301	265.304	265.363	265.367	265.400	265.426	265.429	265.488
RIGHT LIP OF KERB	265.287	265.235	265.300	265.301	265.304	265.363	265.367	265.400	265.426	265.429	265.602
EXISTING SURFACE	265.521	265.522	265.648	265.650	265.665	265.597	265.575	265.590	265.694	265.707	265.894
CHAINAGE	23.527	26.904	40.000	40.110	40.779	52.610	53.261	60.000	65.110	65.761	77.610
	TP	TP									

DESIGN CENTRELINE	265.637	265.646	265.652	265.713	265.729	265.787	265.821	265.886	265.906	265.958	265.962
LEFT LIP OF KERB	265.492	265.500	265.507	265.570	265.583	265.642	265.676	265.740	265.760	265.876	265.881
RIGHT LIP OF KERB	265.611	265.637	265.656	265.791	265.817	265.915	265.967	266.031	266.051	266.039	266.043
EXISTING SURFACE	265.899	265.908	265.912	265.936	265.940	265.979	266.002	266.046	266.060	266.102	266.105
CHAINAGE	78.261	80.000	81.302	88.802	90.110	94.261	96.302	100.000	101.132	104.110	104.359
									TP		TP

DESIGN CENTRELINE	266.030	266.236	266.586	266.870	266.936	267.013	267.112	267.115	267.129	267.169	267.185
LEFT LIP OF KERB						266.932	267.031	267.034	267.040	267.023	267.040
RIGHT LIP OF KERB						267.094	267.193	267.196	267.210	267.297	267.331
EXISTING SURFACE	266.159	266.369	266.735	266.988	267.052	267.124	267.238	267.240	267.248	267.271	267.280
CHAINAGE	108.261	120.000	140.000	156.235	160.000	164.411	170.085	170.235	171.024	173.312	174.251
						TP	TP				

DESIGN CENTRELINE	267.219	267.271	267.273	267.293	267.293	267.294	267.286	267.280	267.252	267.251	267.250
LEFT LIP OF KERB	267.073	267.125	267.128	267.145	267.148	267.166	267.210	267.204	267.176	267.175	267.174
RIGHT LIP OF KERB	267.364	267.416	267.419	267.436	267.439	267.439	267.371	267.357	267.329	267.328	267.327
EXISTING SURFACE	267.299	267.338	267.340	267.389	267.398	267.414	267.477	267.506	267.525	267.526	267.526
CHAINAGE	176.150	180.000	180.240	183.650	184.112	185.051	187.489	188.428	191.150	191.218	191.316
								TP			

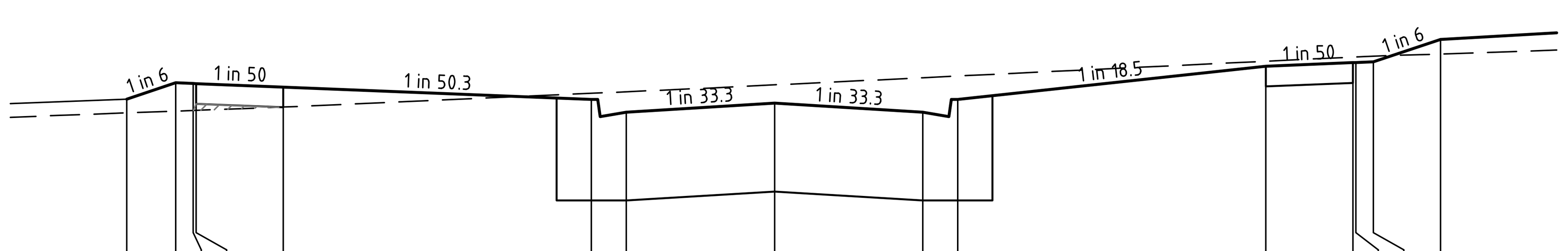
AUSTRAL STREET LONGITUDINAL SECTION



DATUM 264.0

DESIGN SURFACE	265.433	265.472	265.466	265.465	265.435	265.345	265.235	265.290	265.380	265.290	265.235	265.345	265.666	265.696	265.697	265.703	265.943
EXISTING SURFACE	265.289	265.293	265.299	265.300	265.328	265.393	265.407	265.450	265.522	265.595	265.639	265.654	265.726	265.762	265.764	265.771	265.796
OFFSET	-10.535	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	11.741

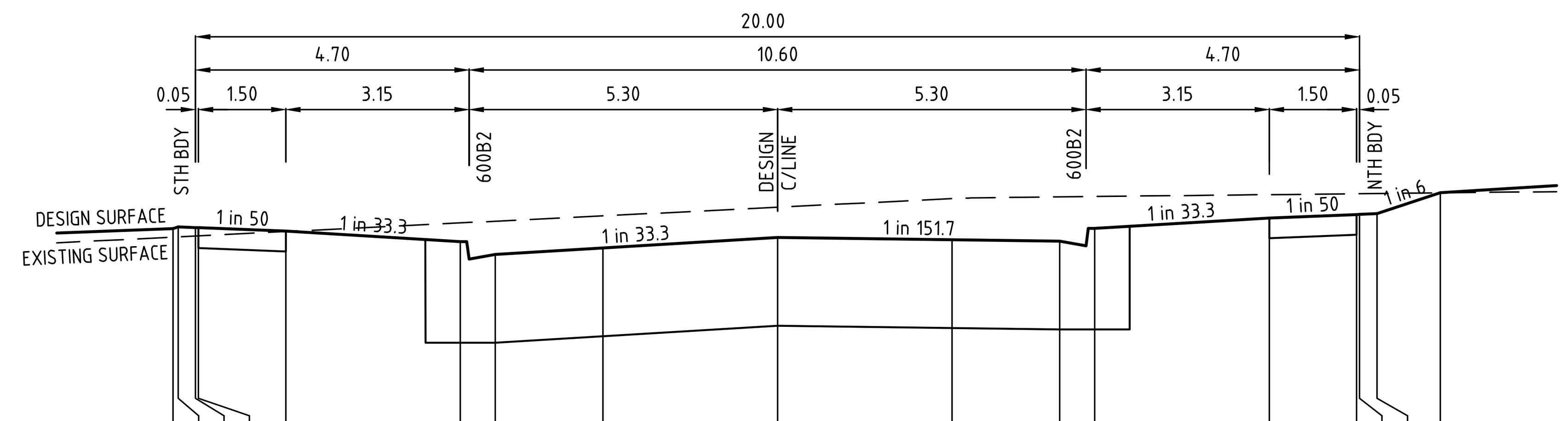
CH 26.904 TP



DATUM 264.0

DESIGN SURFACE	265.398	265.539	265.533	265.532	265.502	265.397	265.287	265.364	265.287	265.397	265.683	265.713	265.714	265.720	265.912
EXISTING SURFACE	265.280	265.296	265.301	265.302	265.330	265.449	265.462	265.521	265.583	265.597	265.725	265.761	265.763	265.768	265.788
OFFSET	-11.146	-10.300	-10.000	-9.950	-8.450	-3.150	-2.550	0.000	2.550	3.150	8.450	9.950	10.000	10.300	11.456

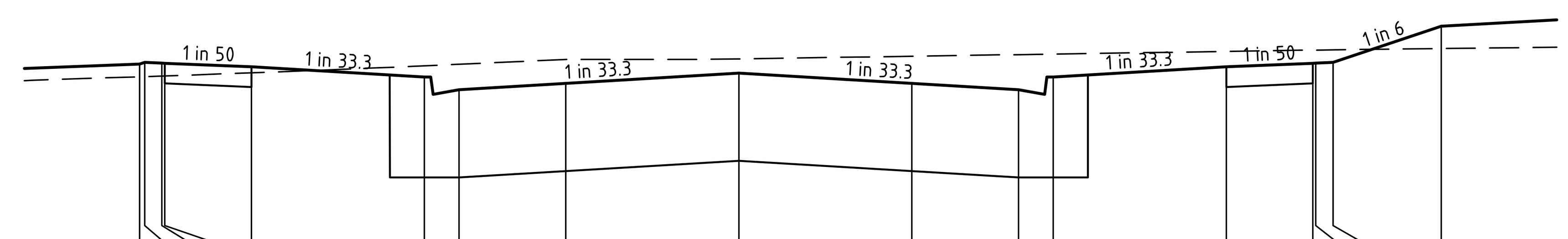
CH 23.527 TP



DATUM 264.0

DESIGN SURFACE	265.711	265.725	265.719	265.718	265.688	265.598	265.488	265.544	265.634	265.614	265.602	265.712	265.802	265.832	265.833	265.839	266.020
EXISTING SURFACE	265.637	265.640	265.647	265.648	265.685	265.760	265.774	265.820	265.894	265.969	265.984	265.987	266.003	266.011	266.011	266.012	266.018
OFFSET	-10.386	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	11.387

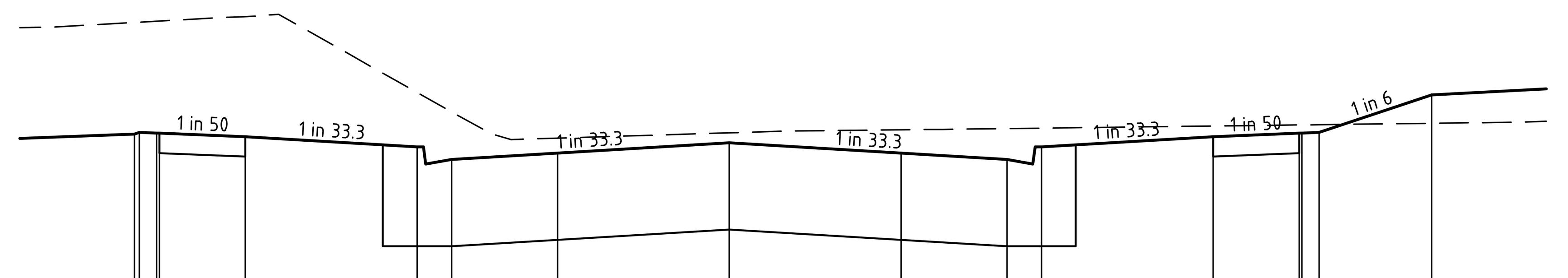
CH 77.610



DATUM 264.0

DESIGN SURFACE	265.649	265.663	265.657	265.656	265.626	265.536	265.426	265.481	265.571	265.481	265.426	265.536	265.626	265.656	265.657	265.663	265.976
EXISTING SURFACE	265.539	265.541	265.545	265.546	265.573	265.634	265.647	265.689	265.694	265.717	265.731	265.736	265.759	265.770	265.770	265.773	265.783
OFFSET	-10.386	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	12.179

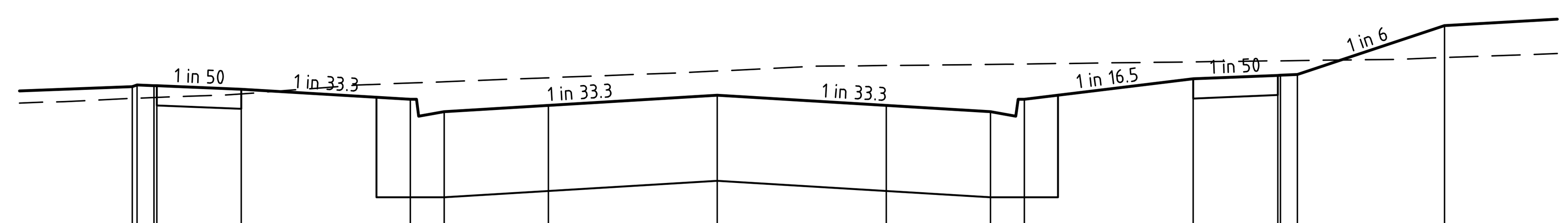
CH 65.110



DATUM 264.0

DESIGN SURFACE	265.586	265.600	265.594	265.593	265.563	265.473	265.363	265.419	265.509	265.419	265.363	265.473	265.563	265.593	265.594	265.600	265.928
EXISTING SURFACE	266.563	266.566	266.574	266.575	266.614	265.949	265.779	265.550	265.597	265.623	265.634	265.638	265.657	265.666	265.666	265.668	265.680
OFFSET	-10.386	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	12.265

CH 52.610



DATUM 264.0

DESIGN SURFACE	265.527	265.541	265.535	265.534	265.504	265.414	265.304	265.360	265.450	265.360	265.304	265.414	265.597	265.627	265.628	265.634	266.069
EXISTING SURFACE	265.422	265.424	265.430	265.431	265.462	265.559	265.570	265.605	265.665	265.714	265.724	265.728	265.746	265.756	265.756	265.758	265.785
OFFSET	-10.386	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	12.911

CH 40.779

AUSTRAL STREET CROSS SECTIONS

WARNING

BEWARE OF UNDERGROUND SERVICES

The locations of underground services are approximate only and their exact position should be proven on site prior to commencing works. No guarantee is given that all existing services are shown.

PRELIMINARY PLAN ONLY

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

SCALE

0 5 10 20 / 0 0.5 1 2 — Scale H 1:500 V 1:50 @ A1 — LONG SECTION

0 1 2 4 / 0 0.5 1 2 — Scale H 1:100 V 1:50 @ A1 — CROSS SECTION

LEGEND

COMPACTED TYPE A STRUCTURAL MATERIAL IN ACCORDANCE WITH COUNCIL TECHNICAL SPEC. SECT. 204, FROM BASE OF PAVEMENT TO 150mm BELOW NATURAL SURFACE, WITH SIDE SLOPES 1 in 0.5 MAX.

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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MITCHELL SHIRE COUNCIL

ARROWSMITH AND LITHGOW ST, BEVERIDGE

TIMBARRA ESTATE - STAGE 5

LONGITUDINAL AND CROSS SECTIONS - 1

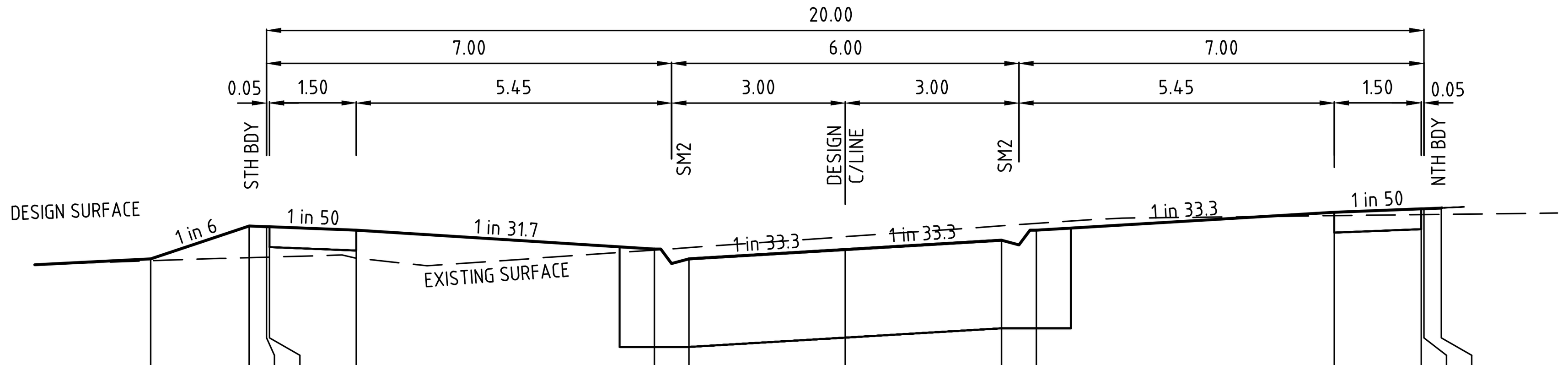
AUSTRAL STREET

DRAWING No. 5R3 — VERSION A

REFERENCE 23017E/5

H:\23017\STAGE-5\CAD\DWG SET\ROAD AND DRAINAGE\23017E_5R3-9.DWG

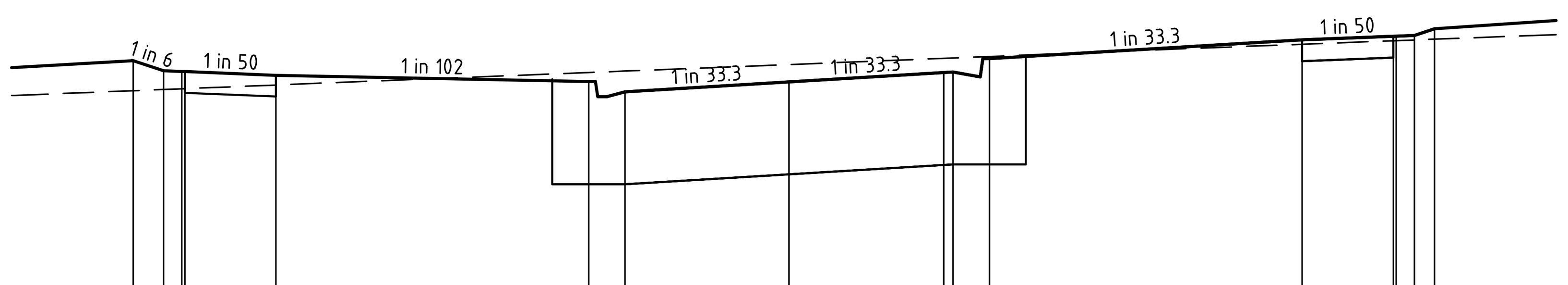
AUSTRAL STREET CROSS SECTIONS



DATUM 266.0

DESIGN SURFACE	266.932	267.216	267.210	267.209	267.179	267.017	266.932	267.013	267.094	267.179	267.334	267.364	267.365	267.371
EXISTING SURFACE	266.916	266.943	266.947	266.948	266.938	267.009	267.030	267.124	267.217	267.238	267.305	267.314	267.314	267.316
OFFSET	-12.004	-10.300	-10.000	-9.950	-8.450	-3.300	-2.700	0.000	2.700	3.300	8.450	9.950	10.000	10.300

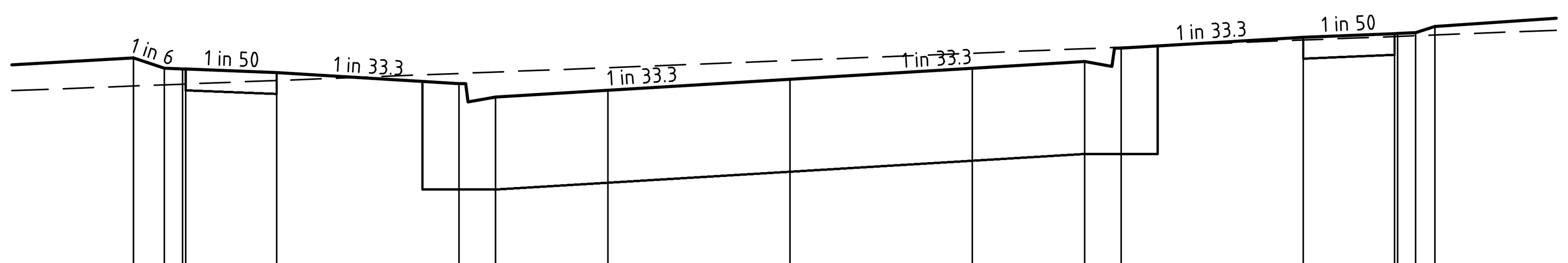
CH 164.411 TP



DATUM 264.0

DESIGN SURFACE	266.137	266.054	266.048	266.047	266.017	265.966	265.881	265.962	266.039	266.043	266.153	266.308	266.338	266.339	266.345	266.400
EXISTING SURFACE	265.890	265.900	265.906	265.907	265.937	266.039	266.051	266.105	266.156	266.159	266.171	266.272	266.300	266.301	266.307	266.313
OFFSET	-10.801	-10.300	-10.000	-9.950	-8.450	-3.300	-2.700	0.000	2.550	2.700	3.300	8.450	9.950	10.000	10.300	10.631

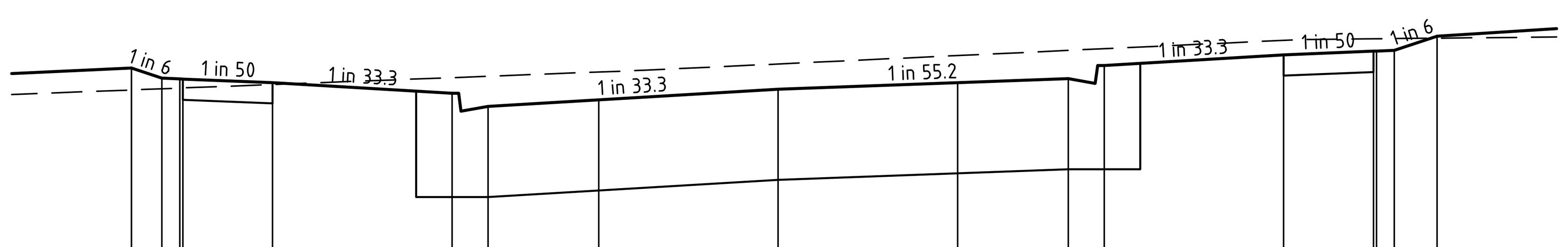
CH 104.359 TP



DATUM 264.0

DESIGN SURFACE	266.082	265.997	265.991	265.990	265.960	265.870	265.760	265.816	265.906	265.996	266.051	266.161	266.251	266.281	266.282	266.288	266.341
EXISTING SURFACE	265.850	265.860	265.866	265.867	265.896	265.954	265.965	266.001	266.060	266.120	266.157	266.169	266.229	266.258	266.259	266.264	266.270
OFFSET	-10.811	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	10.615

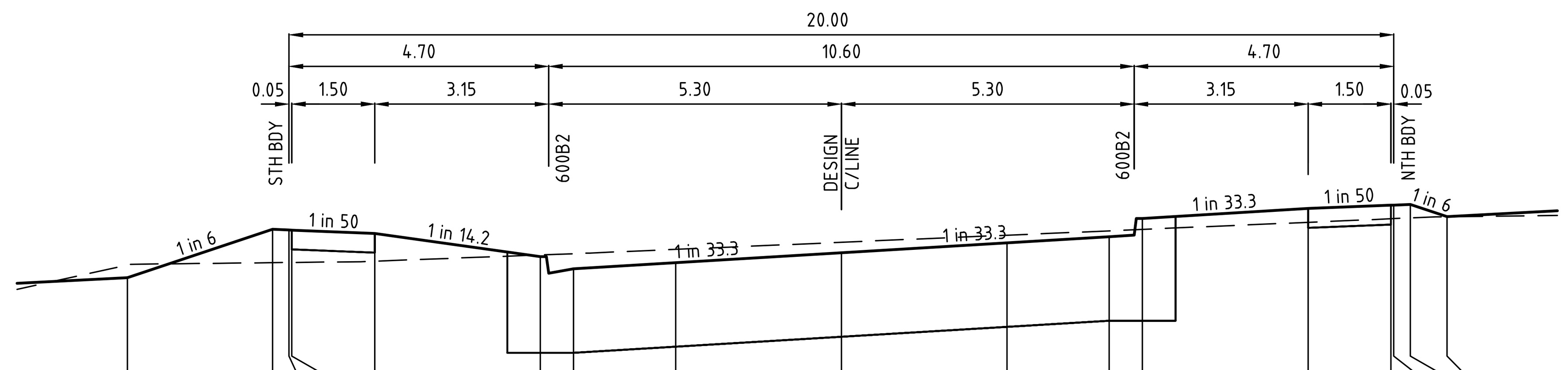
CH 101.132 TP



DATUM 264.0

DESIGN SURFACE	265.905	265.820	265.814	265.813	265.783	265.693	265.583	265.639	265.729	265.783	265.817	265.927	266.017	266.047	266.048	266.054	266.172
EXISTING SURFACE	265.722	265.732	265.737	265.738	265.767	265.825	265.837	265.872	265.940	266.010	266.053	266.067	266.138	266.150	266.151	266.152	266.156
OFFSET	-10.810	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	11.013

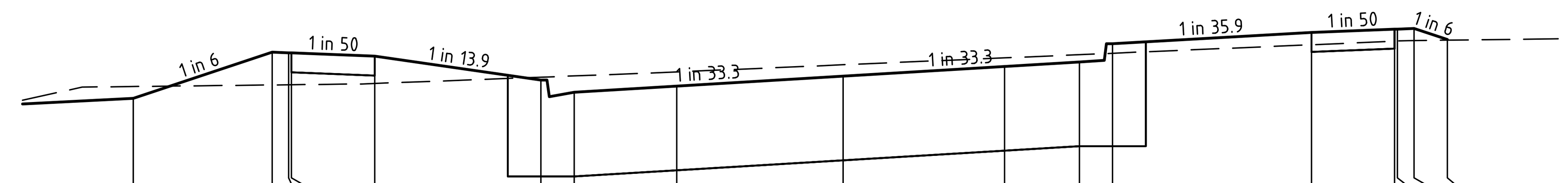
CH 90.110



DATUM 266.0

DESIGN SURFACE	266.960	267.398	267.392	267.391	267.361	267.150	267.040	267.095	267.185	267.275	267.331	267.496	267.586	267.616	267.617	267.623	267.512
EXISTING SURFACE	267.075	267.096	267.097	267.098	267.109	267.166	267.177	267.216	267.280	267.344	267.384	267.397	267.461	267.493	267.494	267.501	267.512
OFFSET	-12.926	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	10.964

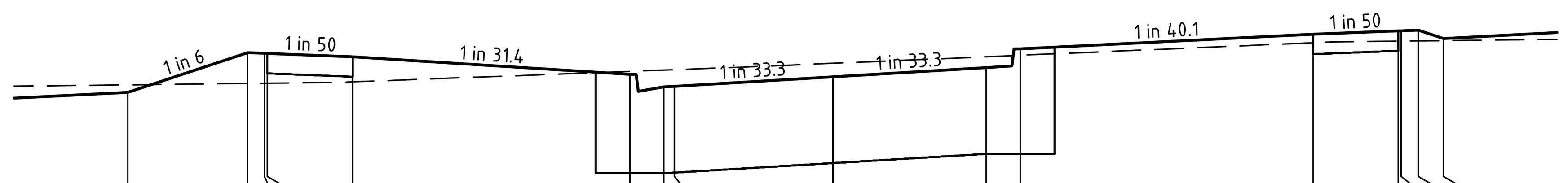
CH 174.251



DATUM 266.0

DESIGN SURFACE	266.968	267.385	267.379	267.378	267.348	267.133	267.023	267.079	267.169	267.256	267.297	267.462	267.562	267.592	267.593	267.599	267.499
EXISTING SURFACE	267.075	267.089	267.090	267.091	267.102	267.159	267.170	267.207	267.271	267.333	267.362	267.375	267.452	267.484	267.485	267.490	267.493
OFFSET	-12.804	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	2.913	4.263	4.863	8.450	9.950	10.000	10.300	10.900

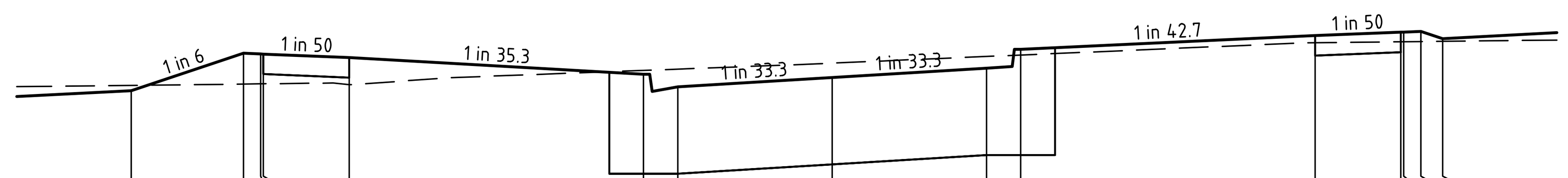
CH 173.312



DATUM 266.0

DESIGN SURFACE	266.991	267.342	267.336	267.335	267.305	267.150	267.040	267.045	267.129	267.210	267.375	267.503	267.533	267.534	267.540	267.466
EXISTING SURFACE	267.058	267.070	267.072	267.072	267.085	267.177	267.188	267.191	267.248	267.306	267.319	267.429	267.443	267.443	267.445	267.447
OFFSET	-12.407	-10.300	-10.000	-9.950	-8.450	-3.573	-2.973	-2.787	0.000	2.700	3.300	8.450	9.950	10.000	10.300	10.745

CH 171.024



DATUM 266.0

DESIGN SURFACE	266.997	267.324	267.318	267.317	267.287	267.141	267.031	267.112	267.193	267.358	267.479	267.509	267.510	267.516	267.453
EXISTING SURFACE	267.044	267.055	267.057	267.057	267.049	267.174	267.186	267.238	267.296	267.309	267.416	267.425	267.425	267.429	267.429
OFFSET	-12.264	-10.300	-10.000	-9.950	-8.450	-3.300	-2.700	0.000	2.700	3.300	8.450	9.950	10.000	10.300	10.681

CH 170.085 TP

AUSTRAL STREET CROSS SECTIONS

WARNING

BEWARE OF UNDERGROUND SERVICES

The locations of underground services are approximate only and their exact position should be proven on site prior to commencing works. No guarantee is given that all existing services are shown.

PRELIMINARY PLAN ONLY

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

SCALE

Scale H 1:100 V 1:50 @ A1

CROSS SECTION

LEGEND

COMPACTED TYPE A STRUCTURAL MATERIAL IN ACCORDANCE WITH COUNCIL TECHNICAL SPEC. SECT. 204, FROM BASE OF PAVEMENT TO 150mm BELOW NATURAL SURFACE, WITH SIDE SLOPES 1 in 0.5 MAX.

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

REEDS CONSULTING

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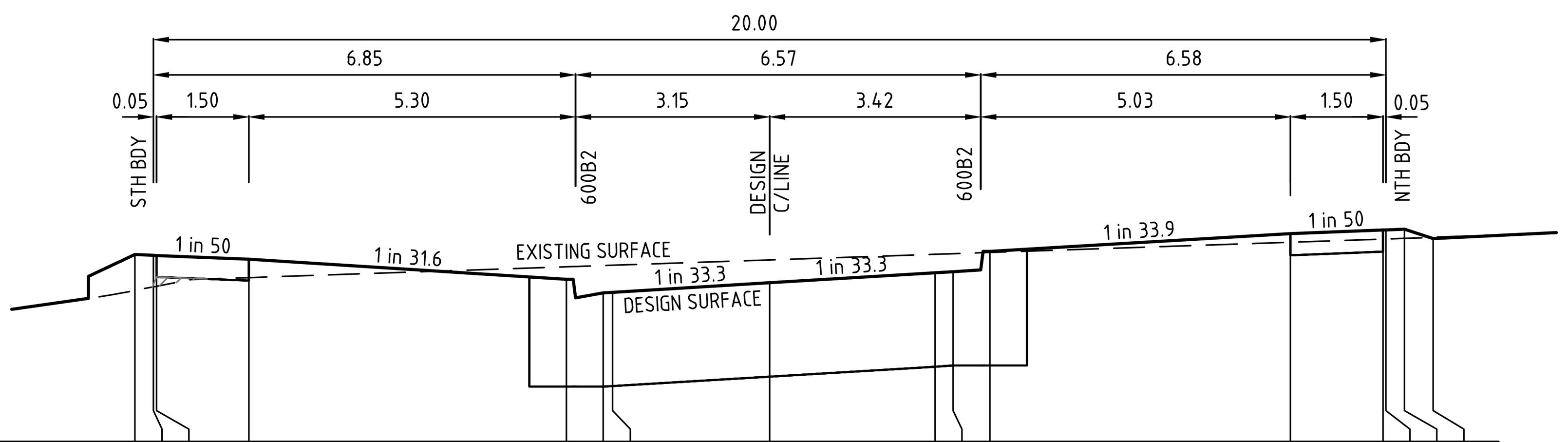
MITCHELL SHIRE COUNCIL
ARROWSMITH AND LITHGOW ST, BEVERIDGE
TIMBARRA ESTATE - STAGE 5
CROSS SECTIONS - 2
AUSTRAL STREET

DRAWING No. 5R4 VERSION A
REFERENCE 23017E/5

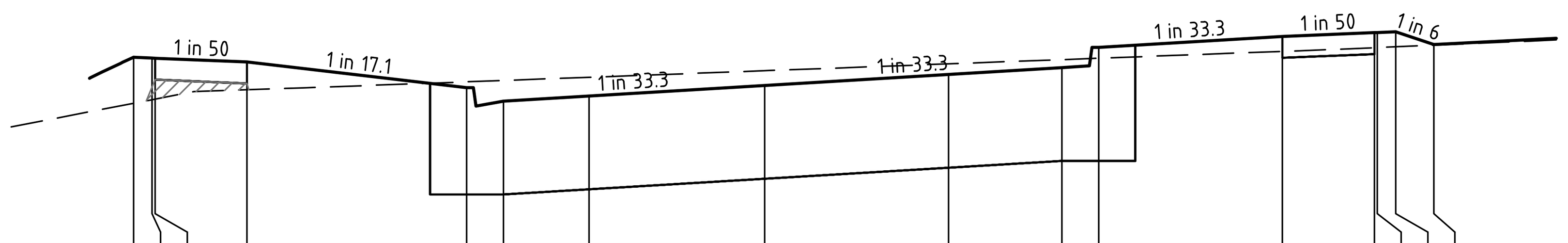
H:\23017\STAGE-5\CAD\DWG SET\ROAD AND DRAINAGE\23017E_5R3-9.DWG



DATUM 266.0

DESIGN SURFACE	267.516	267.510	267.509	267.479	267.316	267.206	267.211	267.287	267.367	267.376	267.541	267.685	267.715	267.716	267.722	267.645
EXISTING SURFACE	267.225	267.254	267.259	267.329	267.417	267.427	267.429	267.472	267.518	267.523	267.533	267.616	267.641	267.642	267.648	267.656
OFFSET	-10.300	-10.000	-9.950	-8.450	-3.300	-2.700	-2.550	0.000	2.681	2.973	3.573	8.450	9.950	10.000	10.300	10.763

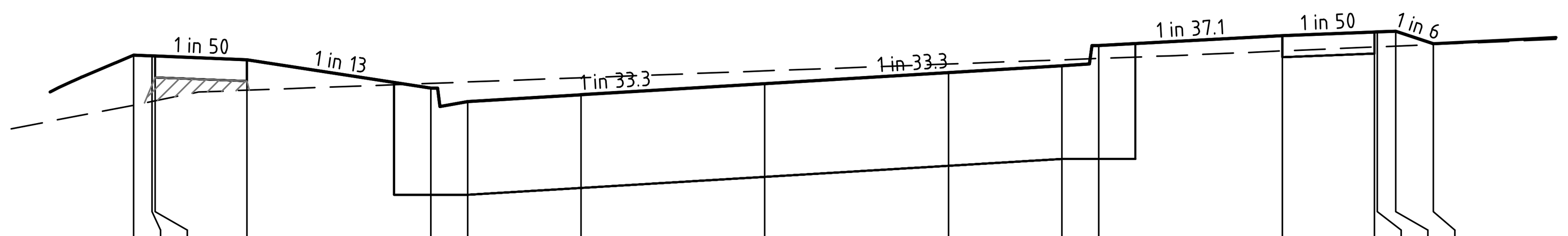
CH 187.339



DATUM 266.0

DESIGN SURFACE	267.523	267.517	267.516	267.486	267.276	267.166	267.208	267.294	267.384	267.439	267.604	267.694	267.724	267.725	267.731	267.628
EXISTING SURFACE	267.149	267.178	267.183	267.259	267.324	267.335	267.361	267.414	267.470	267.505	267.516	267.572	267.602	267.603	267.609	267.622
OFFSET	-10.300	-10.000	-9.950	-8.450	-4.863	-4.263	-2.869	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	10.919

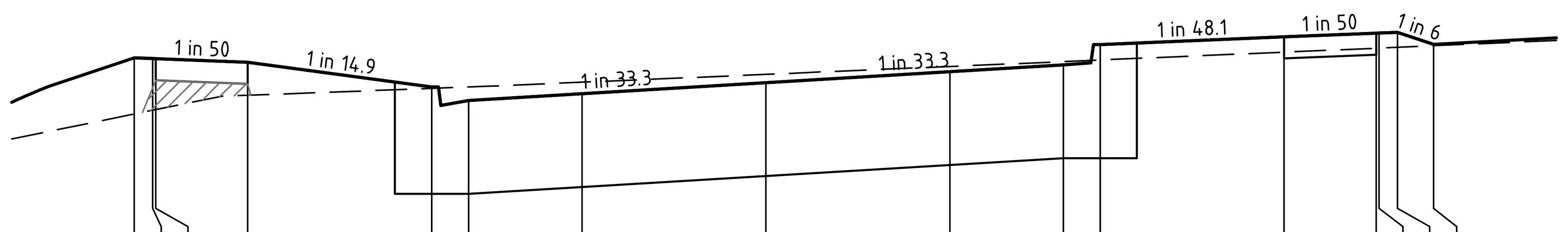
CH 185.051



DATUM 266.0

DESIGN SURFACE	267.526	267.520	267.519	267.489	267.258	267.148	267.203	267.293	267.383	267.439	267.604	267.685	267.715	267.716	267.722	267.619
EXISTING SURFACE	267.118	267.148	267.153	267.240	267.296	267.307	267.342	267.398	267.453	267.488	267.499	267.560	267.592	267.593	267.600	267.613
OFFSET	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	10.914

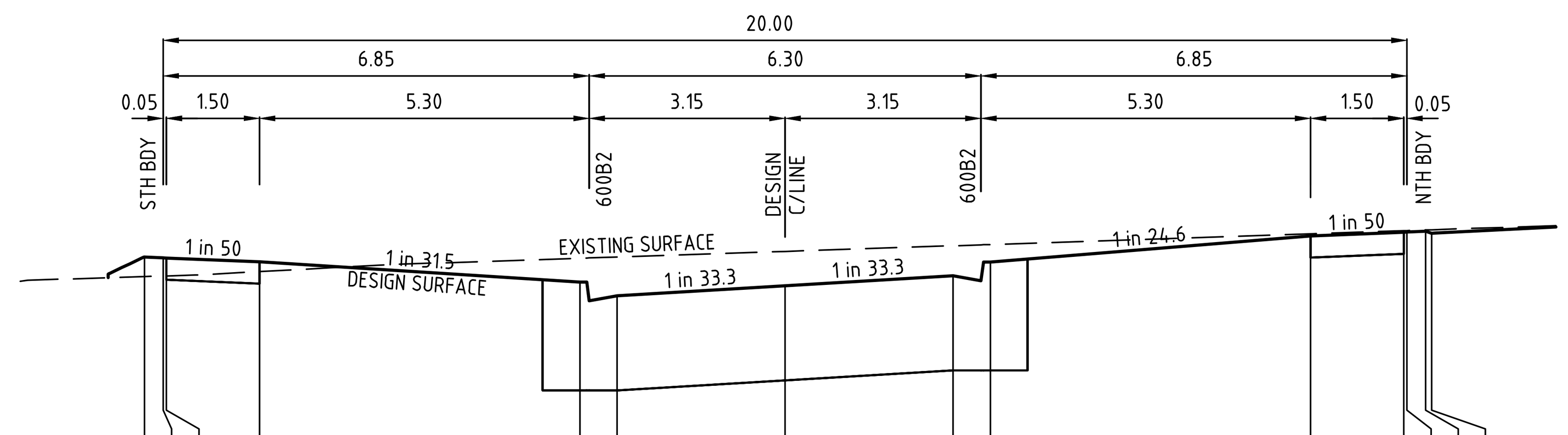
CH 184.112



DATUM 266.0

DESIGN SURFACE	267.475	267.469	267.468	267.438	267.238	267.128	267.183	267.273	267.363	267.419	267.584	267.646	267.676	267.677	267.683	267.585
EXISTING SURFACE	267.018	267.048	267.053	267.170	267.226	267.237	267.276	267.340	267.405	267.444	267.457	267.521	267.553	267.554	267.561	267.573
OFFSET	-10.300	-10.000	-9.950	-8.450	-5.450	-4.850	-3.000	0.000	3.000	4.850	5.450	8.450	9.950	10.000	10.300	10.888

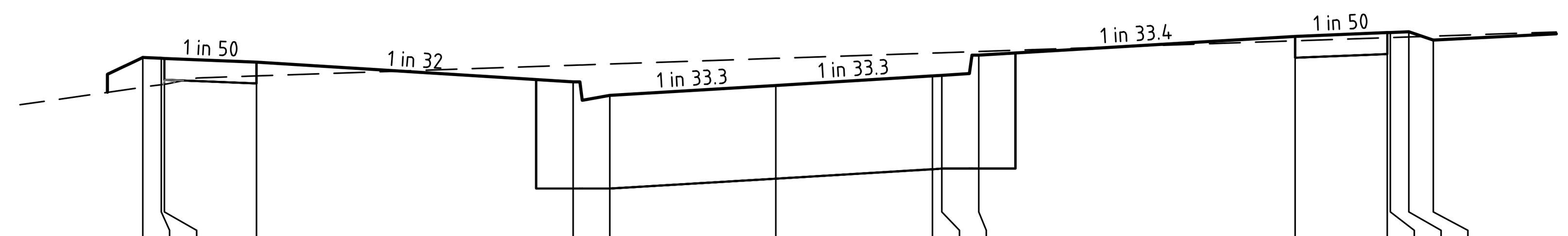
CH 180.240



DATUM 266.0

DESIGN SURFACE	267.480	267.474	267.473	267.443	267.279	267.169	267.250	267.331	267.441	267.651	267.681	267.682	267.688	267.671
EXISTING SURFACE	267.324	267.328	267.329	267.364	267.471	267.481	267.526	267.571	267.581	267.667	267.692	267.693	267.698	267.700
OFFSET	-10.300	-10.000	-9.950	-8.450	-3.300	-2.700	0.000	2.700	3.300	8.450	9.950	10.000	10.300	10.397

CH 191.316



DATUM 266.0

DESIGN SURFACE	267.508	267.502	267.501	267.471	267.310	267.200	267.281	267.358	267.362	267.527	267.681	267.711	267.712	267.718	267.652
EXISTING SURFACE	267.266	267.288	267.291	267.358	267.446	267.456	267.501	267.545	267.547	267.557	267.645	267.670	267.671	267.676	267.683
OFFSET	-10.300	-10.000	-9.950	-8.450	-3.300	-2.700	0.000	2.550	2.700	3.300	8.450	9.950	10.000	10.300	10.699

CH 188.278 TP

AUSTRAL STREET CROSS SECTIONS

WARNING

BEWARE OF UNDERGROUND SERVICES

The locations of underground services are approximate only and their exact position should be proven on site prior to commencing works. No guarantee is given that all existing services are shown.

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

SCALE

0 1 2 4
0 0.5 1 2
Scale H 1:100 V 1:50 @ A1

CROSS SECTION

LEGEND

COMPACTED TYPE A STRUCTURAL MATERIAL IN ACCORDANCE WITH COUNCIL TECHNICAL SPEC. SECT. 204, FROM BASE OF PAVEMENT TO 150mm BELOW NATURAL SURFACE, WITH SIDE SLOPES 1 in 0.5 MAX.

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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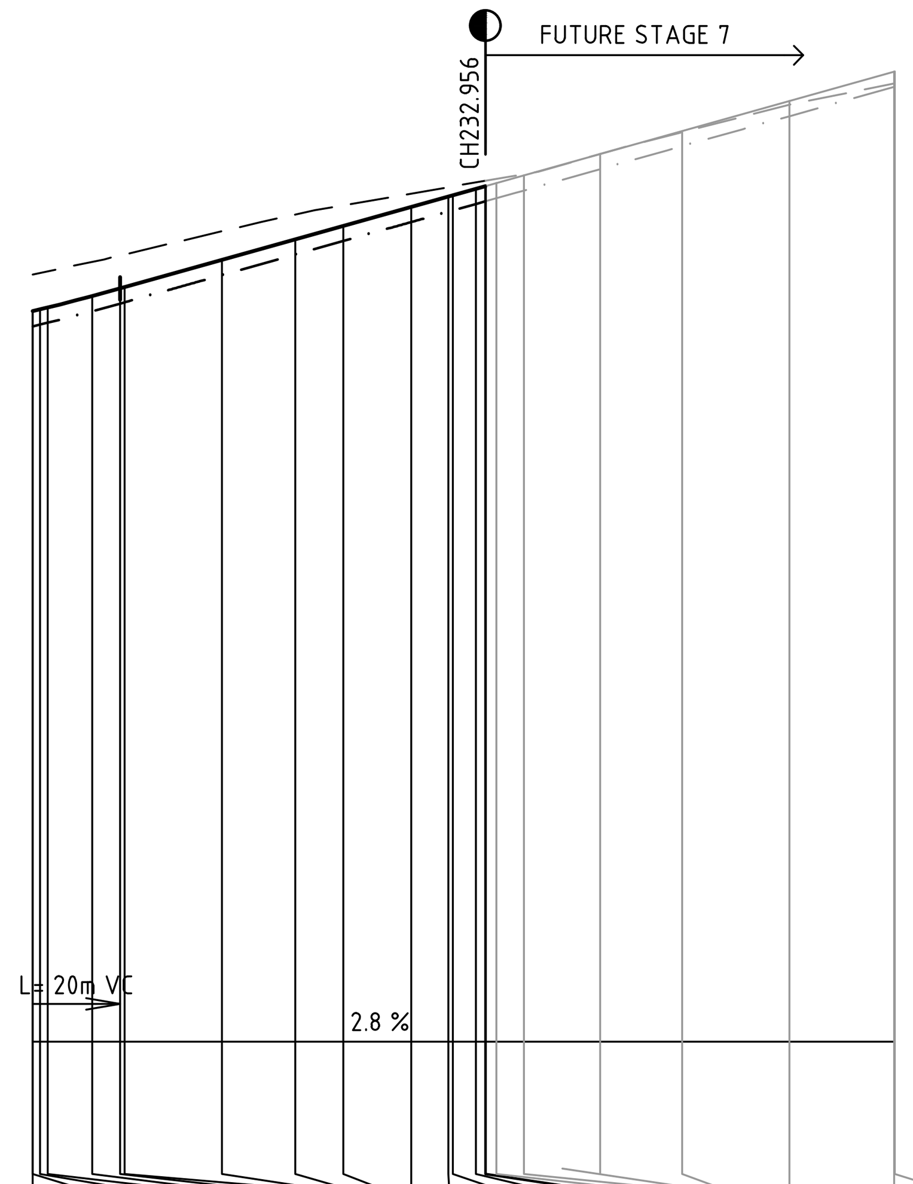
MITCHELL SHIRE COUNCIL
ARROWSMITH AND LITHGOW ST, BEVERIDGE
TIMBARRA ESTATE - STAGE 5
CROSS SECTIONS - 3
AUSTRAL STREET

DRAWING No.	VERSION
5R5	A

REFERENCE 23017E/5

H:\23017\STAGE-5\CAD\DWG SET\ROAD AND DRAINAGE\23017E__5R3-9.DWG



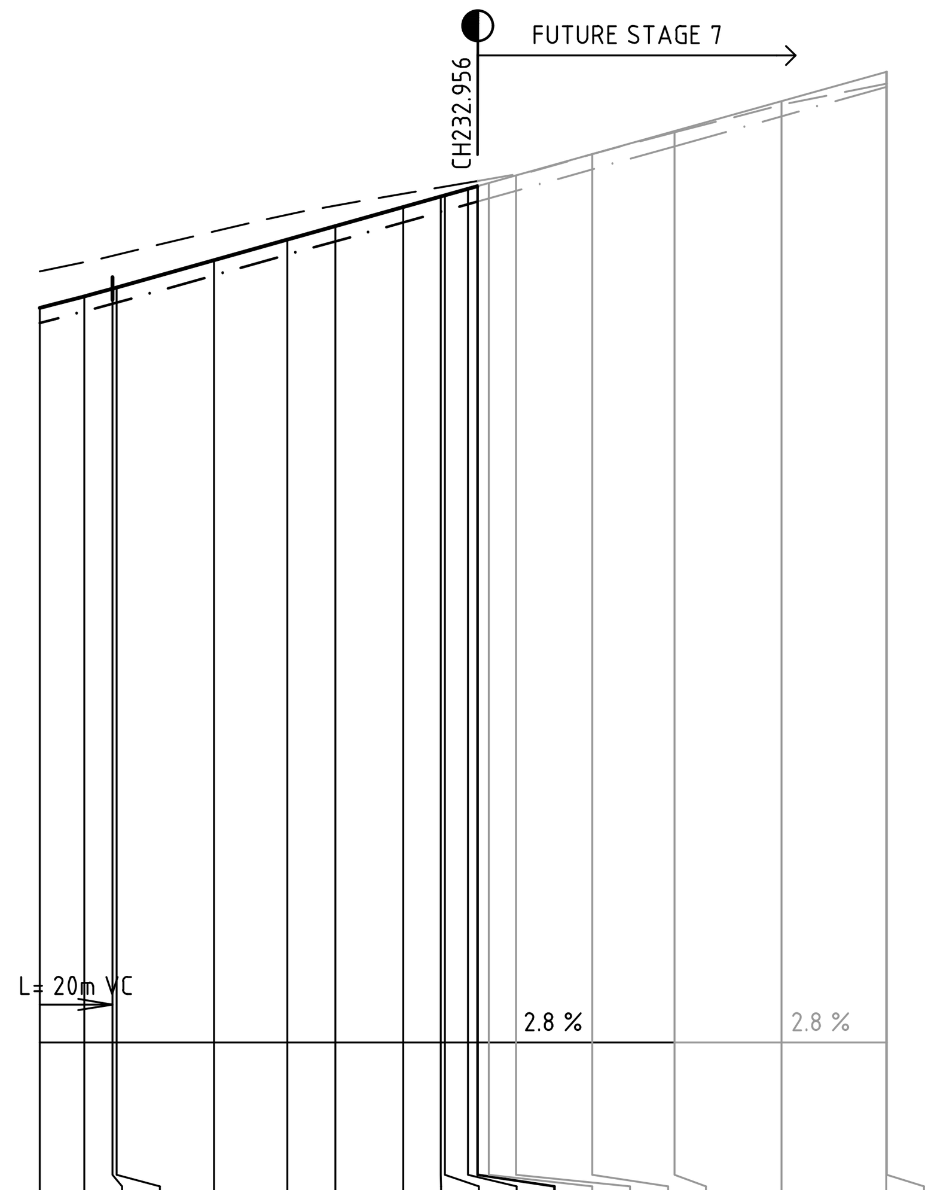
VERTICAL GEOMETRY

HORIZONTAL GEOMETRY

DATUM RL259

CHAINAGE	DESIGN CENTRELINE	RIGHT LIP OF KERB	EXISTING SURFACE	
203.022	264.827	264.726	265.070	
203.030	264.827	264.727	265.070	
203.516	264.839	264.738	265.080	
204.016	264.851	264.751	265.091	
206.950	264.927	264.827	265.153	TP
208.807	264.978	264.877	265.195	
209.094	264.986	264.886	265.202	
215.530	265.166	265.066	265.355	
220.380	265.302	265.202	265.466	
223.557	265.391	265.291	265.527	
228.030	265.516	265.416	265.604	
230.504	265.586	265.485	265.647	
230.794	265.594	265.493	265.652	
232.307	265.636	265.536	265.678	TP
232.956	265.654	265.554	265.689	
233.681	265.674	265.574	265.702	
235.484	265.725	265.624	265.733	
240.530	265.866	265.766	265.866	
245.956	266.018	265.918	266.010	
253.030	266.216	266.116	266.191	
259.956	266.410	266.310	266.332	
260.000	266.411	266.311	266.333	

MURRAY STREET STH BOUND LONGITUDINAL SECTION



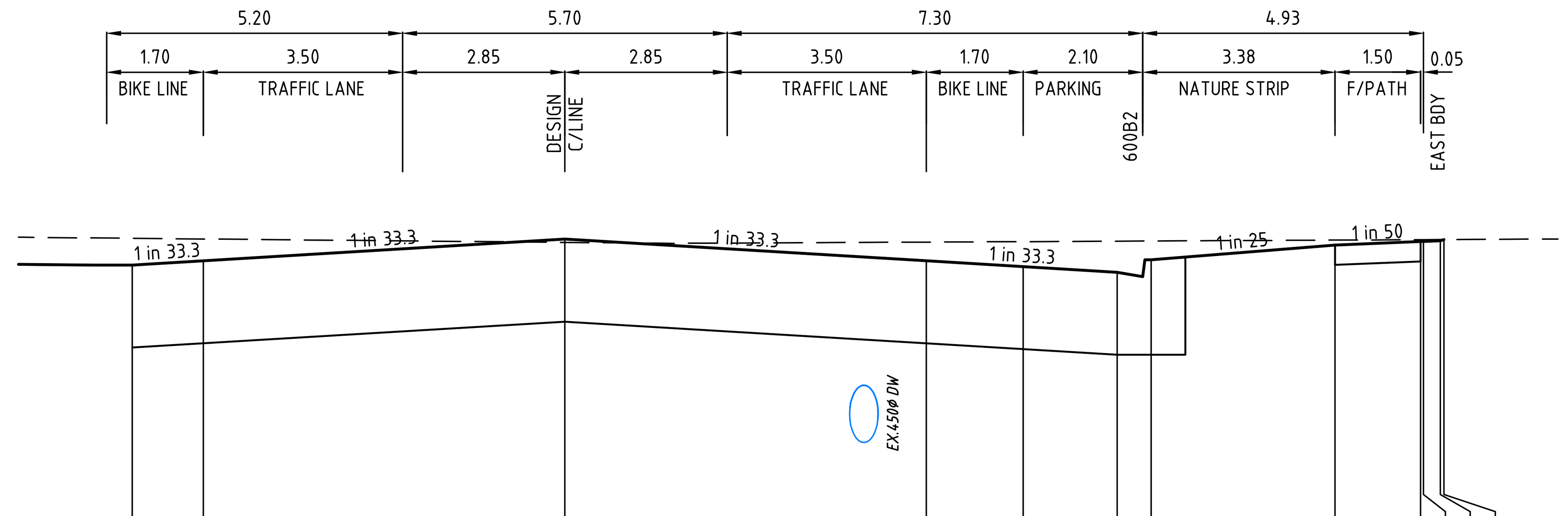
VERTICAL GEOMETRY

HORIZONTAL GEOMETRY

DATUM RL259

CHAINAGE	DESIGN CENTRELINE	RIGHT LIP OF KERB	EXISTING SURFACE	
204.016	264.851	264.751	265.091	
206.950	264.927	264.828	265.153	TP
208.807	264.978	264.877	265.195	
209.094	264.986	264.886	265.202	
215.530	265.166	265.066	265.355	
220.380	265.302	265.202	265.466	
223.557	265.391	265.291	265.527	
228.030	265.516	265.416	265.604	
230.504	265.586	265.485	265.647	
230.794	265.594	265.493	265.652	
232.307	265.636	265.536	265.678	TP
232.956	265.654	265.554	265.689	
233.681	265.674	265.574	265.702	
235.484	265.725	265.624	265.733	
240.530	265.866	265.766	265.866	
245.956	266.018	265.918	266.010	
253.030	266.216	266.116	266.191	
259.956	266.410	266.310	266.332	
260.000	266.411	266.311	266.333	

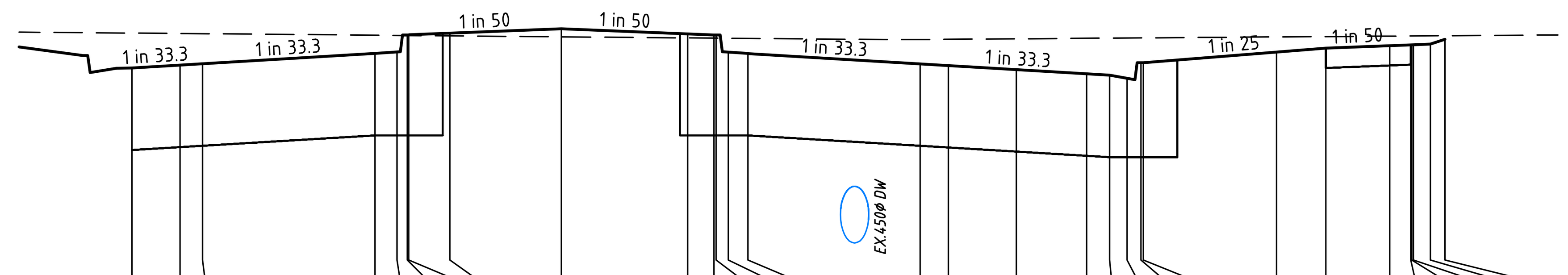
MURRAY STREET NTH BOUND LONGITUDINAL SECTION



DATUM 263.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-1.250	265.265	265.499
0.000	265.302	265.493
6.350	265.493	265.464
12.700	265.302	265.466
14.400	265.251	265.470
16.050	265.202	265.474
16.650	265.312	265.476
19.880	265.441	265.484
21.380	265.471	265.487
21.430	265.472	265.487
21.730	265.478	265.488
21.793	265.488	265.488

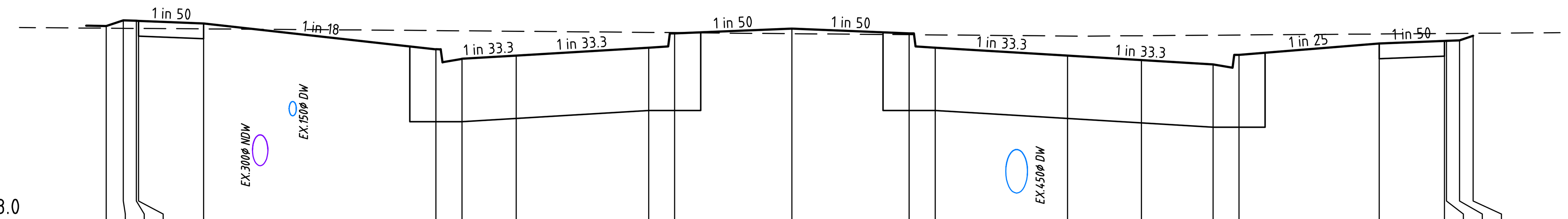
CH 220.380



DATUM 263.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-1.250	264.949	265.258
-0.398	264.974	265.255
0.000	264.986	265.253
3.050	265.078	265.240
3.441	265.091	265.238
3.623	265.243	265.237
3.650	265.243	265.237
4.375	265.257	265.234
6.349	265.297	265.225
8.583	265.252	265.216
9.050	265.243	265.214
9.088	265.243	265.214
9.305	265.089	265.213
9.650	265.078	265.211
12.700	264.986	265.202
13.197	264.971	265.204
14.400	264.935	265.208
15.644	264.898	265.212
16.050	264.886	265.214
16.360	264.858	265.215
16.605	264.996	265.216
16.650	264.996	265.216
19.007	265.090	265.224
19.880	265.125	265.227
21.010	265.147	265.232
21.380	265.155	265.233
21.399	265.155	265.233
21.430	265.156	265.233
21.730	265.162	265.234
21.986	265.204	265.235

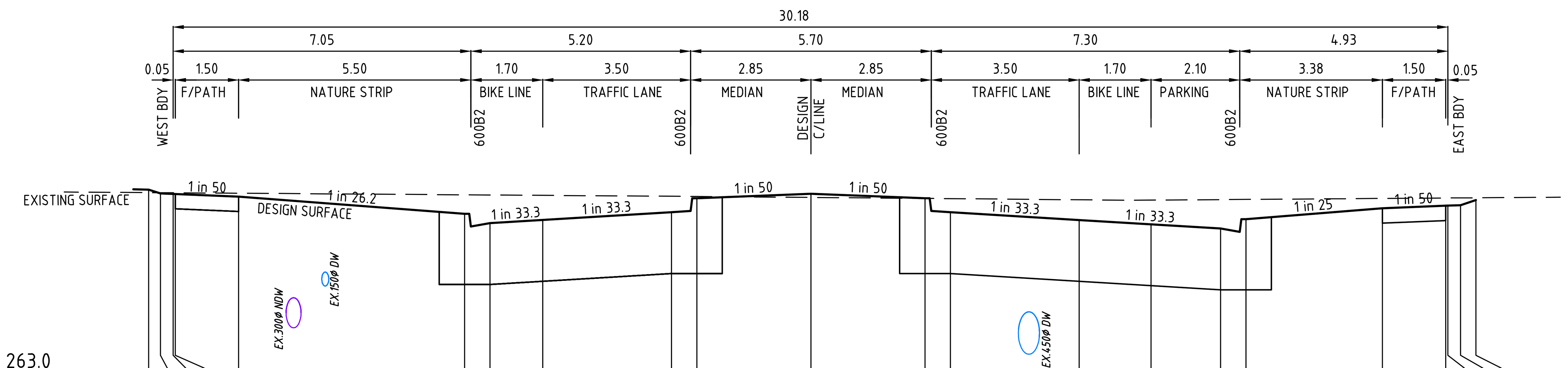
CH 209.094



DATUM 263.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-9.444	265.269	265.243
-9.050	265.334	265.242
-8.750	265.328	265.241
-8.700	265.327	265.241
-7.200	265.297	265.235
-1.850	265.000	265.216
-1.250	264.890	265.213
0.000	264.927	265.208
3.050	265.019	265.195
3.650	265.184	265.192
6.349	265.238	265.180
9.050	265.184	265.169
9.650	265.019	265.166
12.700	264.927	265.153
14.400	264.876	265.157
16.050	264.827	265.163
16.650	264.937	265.165
19.880	265.066	265.176
21.380	265.096	265.182
21.430	265.097	265.182
21.730	265.103	265.183
22.043	265.155	265.184

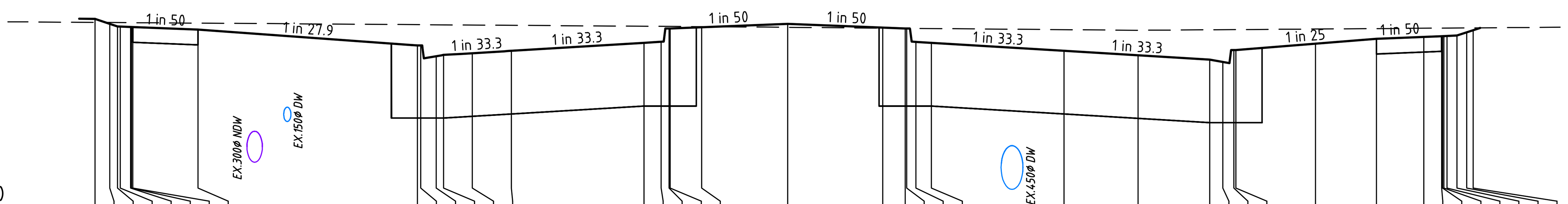
CH 206.950 TP



DATUM 263.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-9.329	265.211	265.176
-9.050	265.165	265.175
-8.750	265.159	265.174
-8.700	265.158	265.173
-7.200	265.128	265.168
-1.850	264.924	265.149
-1.250	264.814	265.147
0.000	264.851	265.143
3.050	264.943	265.132
3.650	265.108	265.130
6.349	265.162	265.118
9.050	265.108	265.107
9.650	264.943	265.104
12.700	264.851	265.091
14.400	264.800	265.087
16.050	264.751	265.093
16.650	264.861	265.095
19.880	264.990	265.106
21.380	265.020	265.112
21.430	265.021	265.112
21.730	265.027	265.113
22.092	265.087	265.114

CH 204.016



DATUM 263.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-9.568	265.194	265.154
-9.229	265.138	265.153
-9.050	265.108	265.152
-8.986	265.106	265.152
-8.750	265.102	265.151
-8.730	265.101	265.151
-8.700	265.101	265.151
-7.200	265.071	265.146
-2.159	264.890	265.128
-2.083	264.890	265.128
-1.726	264.765	265.126
-1.559	264.780	265.126
-0.896	264.800	265.123
0.000	264.827	265.120
3.050	264.918	265.110
3.441	264.931	265.108
3.623	265.083	265.107
3.650	265.083	265.107
4.375	265.098	265.105
6.349	265.137	265.097
8.535	265.094	265.088
9.050	265.083	265.086
9.085	265.083	265.086
9.296	264.930	265.085
9.650	264.918	265.083
12.700	264.827	265.070
14.400	264.776	265.063
16.050	264.726	265.069
16.351	264.700	265.070
16.603	264.836	265.071
16.650	264.836	265.071
18.477	264.909	265.078
19.880	264.966	265.083
20.966	264.987	265.087
21.380	264.996	265.088
21.398	264.996	265.088
21.430	264.997	265.088
21.501	264.998	265.088
21.730	265.003	265.089
21.955	265.040	265.090
22.100	265.064	265.091

CH 203.022

MURRAY STREET CROSS SECTIONS

WARNING

BEWARE OF UNDERGROUND SERVICES

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PRELIMINARY PLAN ONLY

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

SCALE

0 5 10 20 / 0 0.5 1 2 — Scale H 1:500 V 1:50 @ A1 — LONG SECTION

0 1 2 4 / 0 0.5 1 2 — Scale H 1:100 V 1:50 @ A1 — CROSS SECTION

LEGEND

COMPACTED TYPE A STRUCTURAL MATERIAL IN ACCORDANCE WITH COUNCIL TECHNICAL SPEC. SECT. 204, FROM BASE OF PAVEMENT TO 150mm BELOW NATURAL SURFACE, WITH SIDE SLOPES 1 in 0.5 MAX.

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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MITCHELL SHIRE COUNCIL

ARROWSMITH AND LITHGOW ST, BEVERIDGE

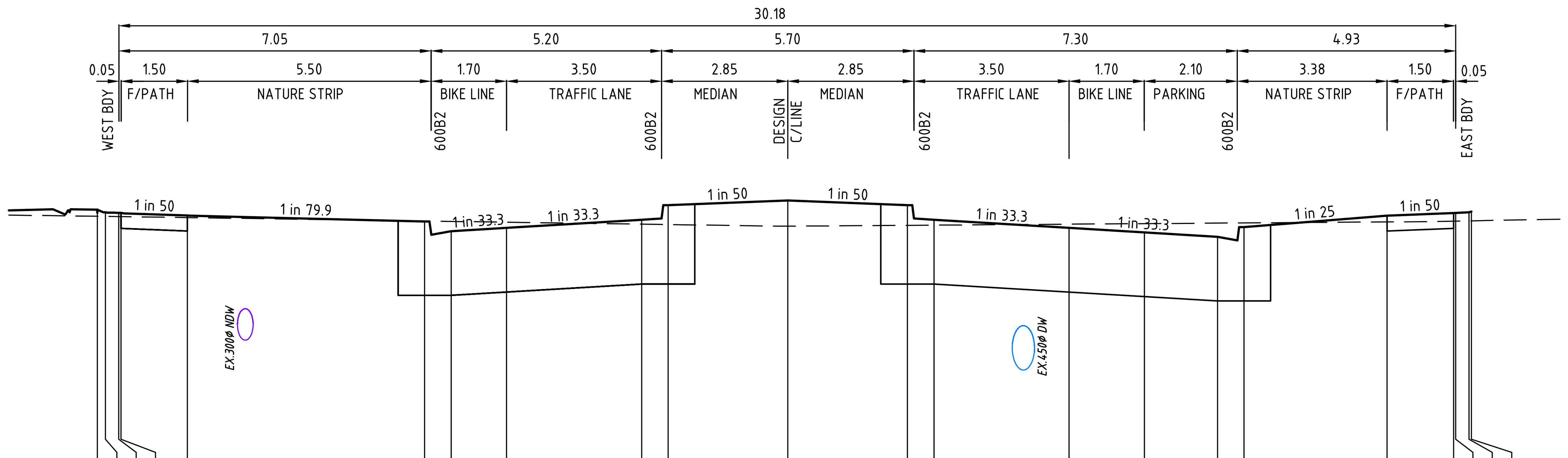
TIMBARRA ESTATE - STAGE 5

LONGITUDINAL AND CROSS SECTIONS - 1

MURRAY STREET

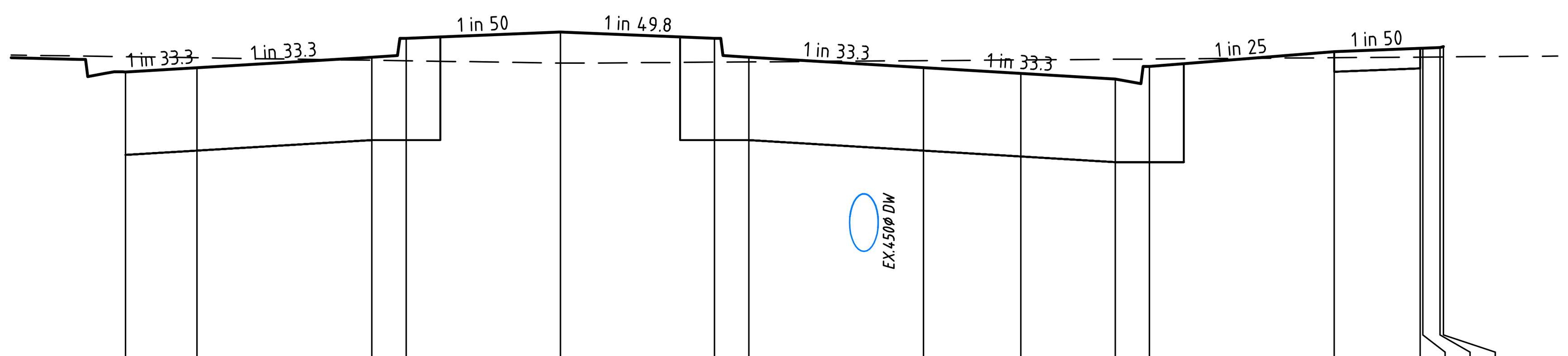
DRAWING No. 5R6 | VERSION A

REFERENCE 23017E/5



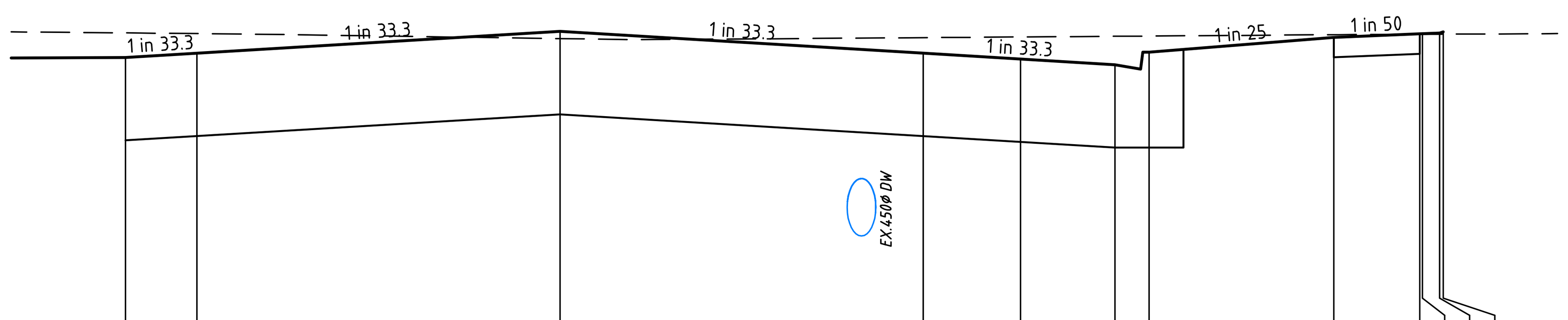
DESIGN SURFACE	265.843	265.813	265.807	265.806	265.776	265.709	265.599	265.636	265.728	265.893	265.946	265.893	265.728	265.636	265.585	265.536	265.646	265.775	265.805	265.806	265.812	265.820
EXISTING SURFACE	265.767	265.765	265.763	265.763	265.753	265.714	265.709	265.700	265.678	265.674	265.655	265.665	265.667	265.678	265.684	265.690	265.692	265.704	265.712	265.713	265.715	265.716
OFFSET	-9.237	-9.056	-8.756	-8.706	-7.206	-1.850	-1.250	0.000	3.050	3.650	6.349	9.050	9.650	12.700	14.400	16.050	16.650	19.880	21.380	21.430	21.730	21.782

CH 232.307 TP



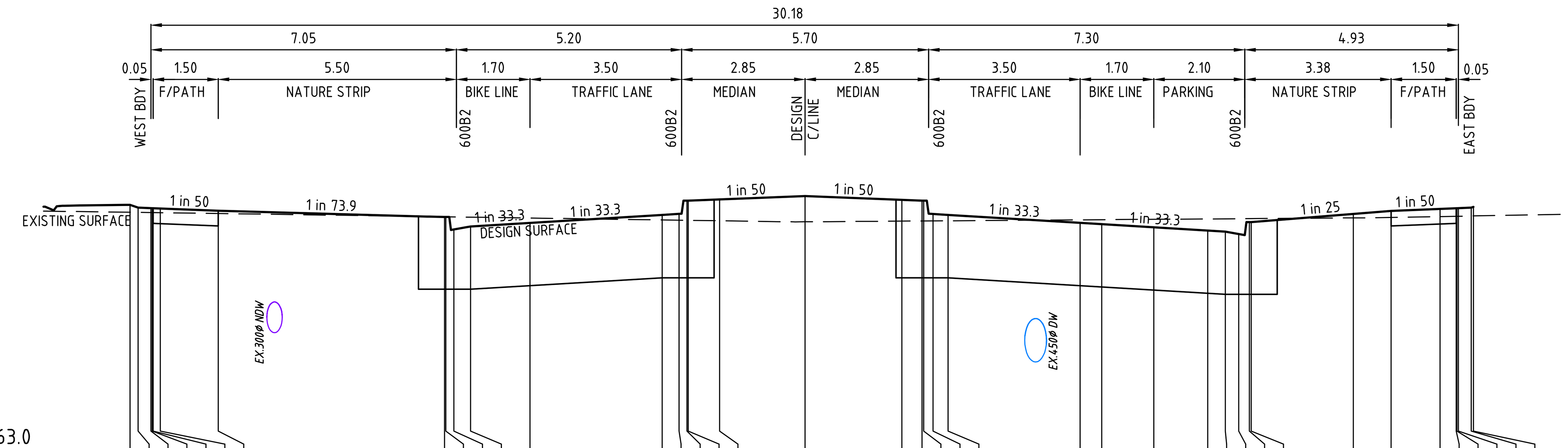
DESIGN SURFACE	265.548	265.586	265.677	265.842	265.896	265.842	265.677	265.586	265.535	265.485	265.595	265.724	265.754	265.755	265.761	265.771
EXISTING SURFACE	265.681	265.672	265.650	265.646	265.626	265.634	265.636	265.647	265.653	265.659	265.661	265.672	265.678	265.678	265.679	265.679
OFFSET	-1.250	0.000	3.055	3.655	6.354	9.045	9.645	12.700	14.400	16.050	16.650	19.880	21.380	21.430	21.730	21.786

CH 230.504



DESIGN SURFACE	265.354	265.391	265.582	265.391	265.340	265.291	265.401	265.530	265.560	265.561	265.567	265.577
EXISTING SURFACE	265.568	265.562	265.519	265.527	265.533	265.539	265.541	265.552	265.556	265.556	265.557	265.557
OFFSET	-1.250	0.000	6.350	12.700	14.400	16.050	16.650	19.880	21.380	21.430	21.730	21.792

CH 223.557



DESIGN SURFACE	265.861	265.831	265.825	265.824	265.824	265.820	265.794	265.723	265.723	265.579	265.613	265.654	265.746	265.759	265.911	265.911	265.925	265.965	265.920	265.911	265.911	265.757	265.746	265.654	265.639	265.603	265.566	265.554	265.526	265.664	265.664	265.758	265.793	265.815	265.823	265.823	265.824	265.830	265.838
EXISTING SURFACE	265.776	265.775	265.773	265.773	265.773	265.772	265.762	265.725	265.724	265.723	265.720	265.710	265.688	265.685	265.684	265.684	265.678	265.666	265.674	265.676	265.676	265.677	265.678	265.689	265.691	265.695	265.700	265.701	265.702	265.703	265.703	265.712	265.717	265.727	265.731	265.731	265.731	265.734	265.734
OFFSET	-9.233	-9.049	-8.751	-8.723	-8.699	-8.536	-7.199	-1.975	-1.946	-1.759	-1.375	0.000	3.050	3.441	3.623	3.650	4.375	6.349	8.583	9.050	9.088	9.305	9.650	12.700	13.197	14.400	15.644	16.050	16.360	16.605	16.650	19.007	19.880	21.010	21.380	21.399	21.430	21.730	21.780

CH 232.956

MURRAY STREET CROSS SECTIONS

WARNING

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

SCALE

0 1 2 4
0 0.5 1 2
Scale H 1:100 V 1:50 @ A1

CROSS SECTION

LEGEND

COMPACTED TYPE A STRUCTURAL MATERIAL IN ACCORDANCE WITH COUNCIL TECHNICAL SPEC. SECT. 204, FROM BASE OF PAVEMENT TO 150mm BELOW NATURAL SURFACE, WITH SIDE SLOPES 1 in 0.5 MAX.

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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MITCHELL SHIRE COUNCIL

ARROWSMITH AND LITHGOW ST, BEVERIDGE

TIMBARRA ESTATE - STAGE 5

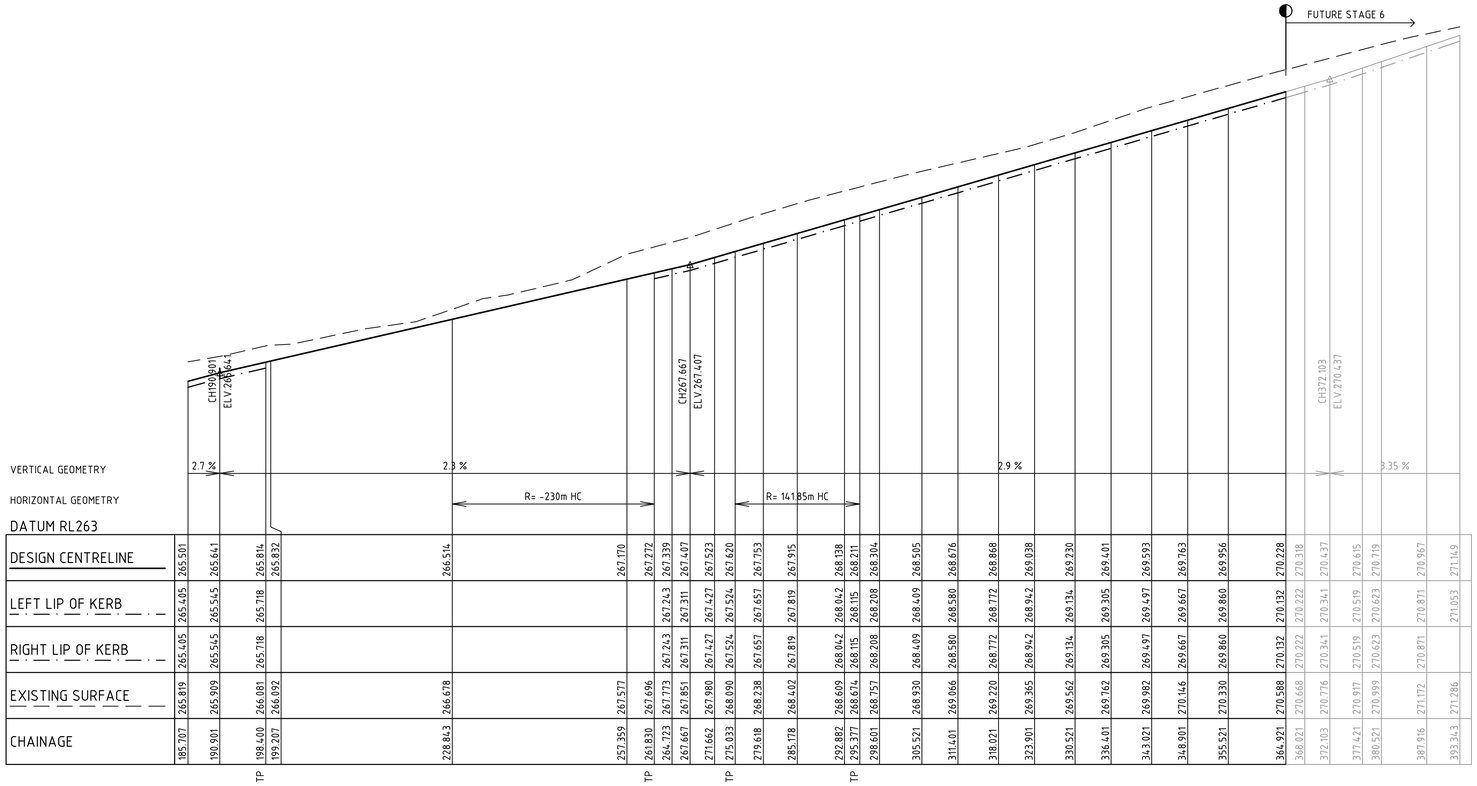
CROSS SECTIONS - 2

MURRAY STREET

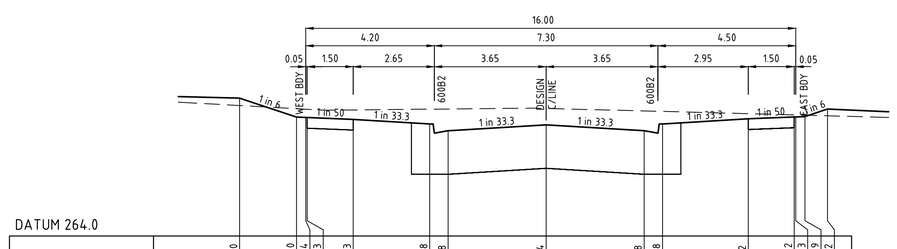
DRAWING No. 5R7

VERSION A

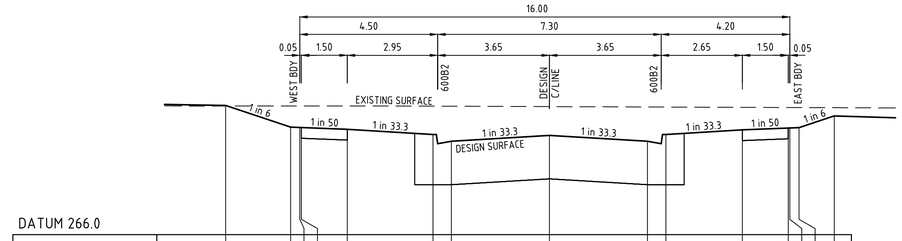
REFERENCE 23017E/5



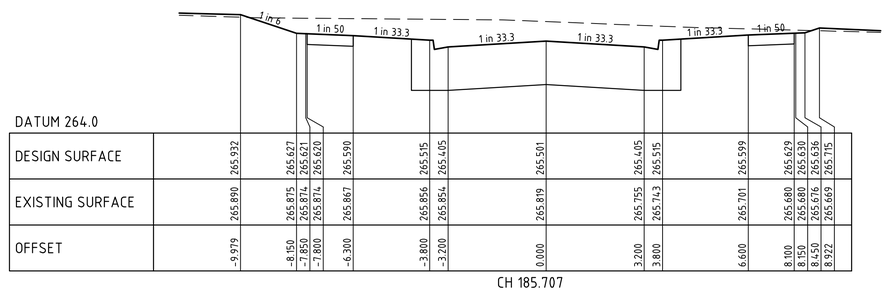
CYPRESS CRESCENT - BRISTLECONE STREET LONGITUDINAL SECTION



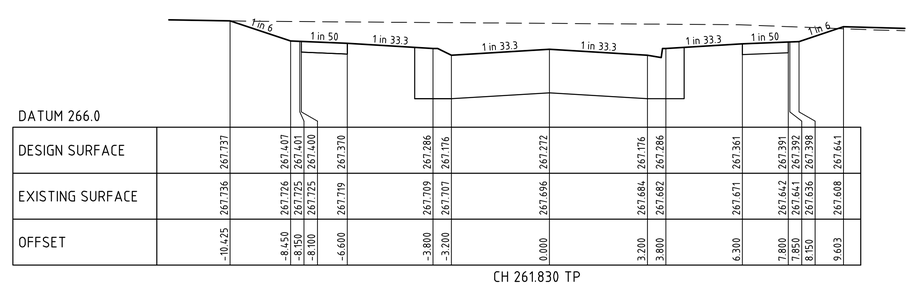
CH 198.400 TP



CH 275.033 TP



CH 185.707



CH 261.830 TP

CYPRESS CRESCENT - BRISTLECONE STREET CROSS SECTIONS

WARNING

BEWARE OF UNDERGROUND SERVICES

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PRELIMINARY PLAN ONLY

NOT APPROVED FOR CONSTRUCTION

VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

SCALE

0 5 10 20
0 0.5 1 2
Scale H 1:500 V 1:50 @ A1
LONG SECTION

0 1 2 4
0 0.5 1 2
Scale H 1:100 V 1:50 @ A1
CROSS SECTION

LEGEND

COMPACTED TYPE A STRUCTURAL MATERIAL IN ACCORDANCE WITH COUNCIL TECHNICAL SPEC. SECT. 204, FROM BASE OF PAVEMENT TO 150mm BELOW NATURAL SURFACE, WITH SIDE SLOPES 1 in 0.5 MAX.

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

REEDS CONSULTING
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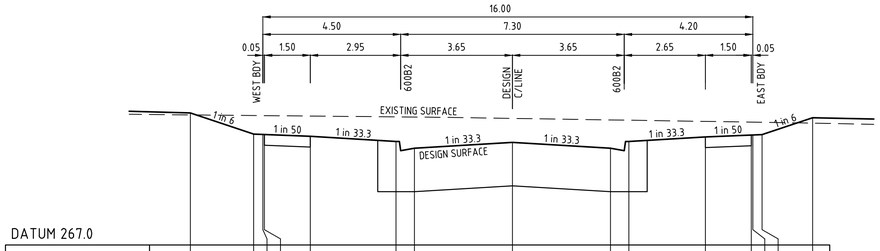
Lvl 6, 440 Elizabeth Street Melbourne Victoria 3000
p (03) 8660 3000

MITCHELL SHIRE COUNCIL
ARROWSMITH AND LITHGOW ST, BEVERIDGE
TIMBARRA ESTATE - STAGE 5
LONGITUDINAL AND CROSS SECTIONS - 1
CYPRESS CRESCENT - BRISTLECONE STREET

DRAWING No.	VERSION
5R8	A
REFERENCE	
23017E/5	
SHEET	
8 OF 17	

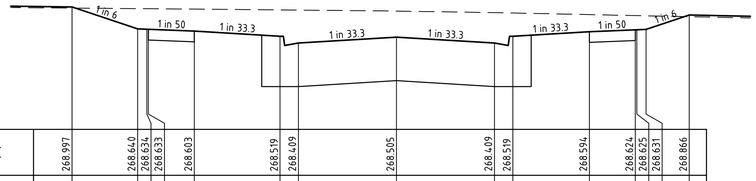
H:\23017\STAGE-5\CAD\DWG SET\ROAD AND DRAINAGE\23017E_5R3-9.DWG



DATUM 267.0

DESIGN SURFACE	269.155	268.811	268.805	268.804	268.774	268.690	268.580	268.676	268.580	268.690	268.765	268.795	268.796	268.802	269.076
EXISTING SURFACE	269.123	269.114	269.112	269.112	269.105	269.091	269.088	269.066	269.042	269.037	269.017	269.006	269.005	269.003	268.989
OFFSET	-10.515	-8.450	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	6.300	7.800	7.850	8.150	9.799

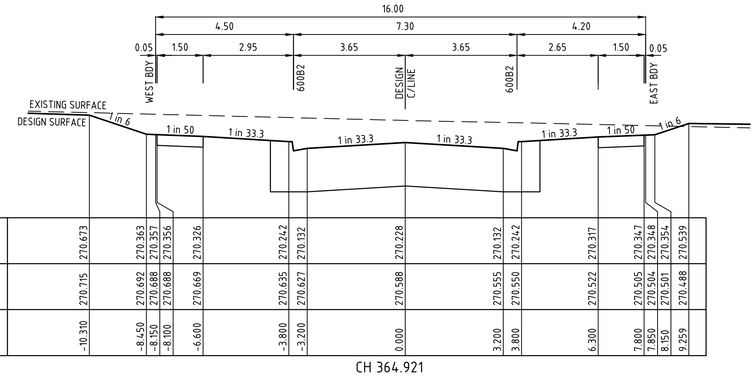
CH 311.401



DATUM 267.0

DESIGN SURFACE	268.997	268.640	268.634	268.633	268.603	268.519	268.409	268.505	268.409	268.519	268.594	268.624	268.625	268.631	268.866
EXISTING SURFACE	268.980	268.971	268.969	268.969	268.963	268.950	268.947	268.930	268.905	268.899	268.873	268.857	268.857	268.853	268.839
OFFSET	-10.592	-8.450	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	6.300	7.800	7.850	8.150	9.558

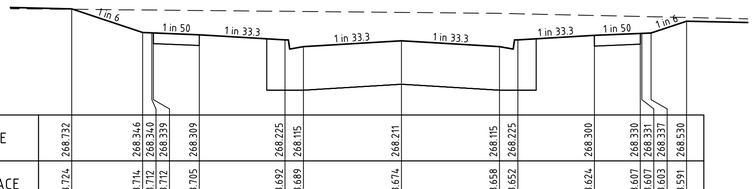
CH 305.521



DATUM 269.0

DESIGN SURFACE	270.673	270.363	270.357	270.356	270.326	270.242	270.132	270.228	270.132	270.242	270.317	270.347	270.348	270.354	270.539
EXISTING SURFACE	270.715	270.692	270.688	270.688	270.669	270.655	270.627	270.588	270.555	270.550	270.522	270.505	270.504	270.501	270.488
OFFSET	-10.310	-8.450	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	6.300	7.800	7.850	8.150	9.259

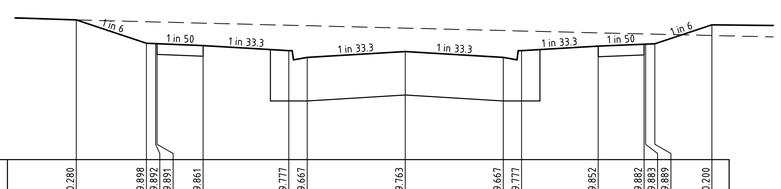
CH 364.921



DATUM 267.0

DESIGN SURFACE	268.732	268.346	268.340	268.339	268.309	268.225	268.115	268.211	268.115	268.225	268.300	268.330	268.331	268.337	268.530
EXISTING SURFACE	268.724	268.714	268.712	268.712	268.705	268.692	268.689	268.674	268.658	268.652	268.624	268.607	268.607	268.603	268.591
OFFSET	-10.767	-8.450	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	6.300	7.800	7.850	8.150	9.310

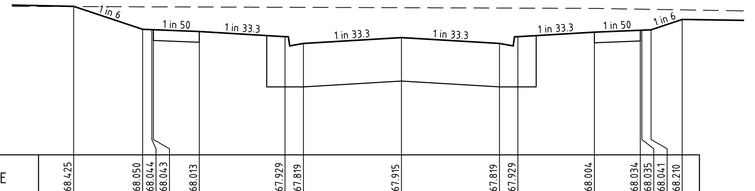
CH 295.377 TP



DATUM 268.0

DESIGN SURFACE	270.280	269.808	269.802	269.801	269.861	269.777	269.667	269.763	269.667	269.777	269.852	269.882	269.883	269.889	270.200
EXISTING SURFACE	270.279	270.250	270.246	270.245	270.227	270.192	270.185	270.146	270.106	270.099	270.068	270.051	270.050	270.047	270.025
OFFSET	-10.738	-8.450	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	6.300	7.800	7.850	8.150	10.014

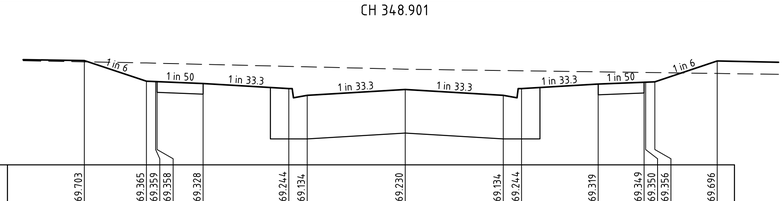
CH 348.901



DATUM 266.0

DESIGN SURFACE	268.425	268.050	268.044	268.043	268.013	267.929	267.819	267.915	267.819	267.929	268.004	268.034	268.035	268.041	268.210
EXISTING SURFACE	268.421	268.417	268.416	268.416	268.414	268.409	268.408	268.402	268.397	268.395	268.390	268.377	268.377	268.375	268.366
OFFSET	-10.703	-8.450	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	6.300	7.800	7.850	8.150	9.167

CH 285.178



DATUM 268.0

DESIGN SURFACE	269.703	269.365	269.359	269.358	269.328	269.244	269.134	269.230	269.134	269.244	269.319	269.349	269.350	269.356	269.696
EXISTING SURFACE	269.682	269.666	269.660	269.659	269.641	269.608	269.600	269.562	269.540	269.536	269.519	269.508	269.508	269.506	269.492
OFFSET	-10.477	-8.450	-8.150	-8.100	-6.600	-3.800	-3.200	0.000	3.200	3.800	6.300	7.800	7.850	8.150	10.187

CH 330.521

CYPRESS CRESCENT - BRISTLECONE STREET CROSS SECTIONS

WARNING

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PRELIMINARY PLAN ONLY

NOT APPROVED FOR CONSTRUCTION

VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

SCALE

0 1 2 4

0 0.5 1 2

Scale H 1:100 V 1:50 @ A1

CROSS SECTION

LEGEND

COMPACTED TYPE A STRUCTURAL MATERIAL IN ACCORDANCE WITH COUNCIL TECHNICAL SPEC. SECT. 204, FROM BASE OF PAVEMENT TO 150mm BELOW NATURAL SURFACE, WITH SIDE SLOPES 1 in 0.5 MAX.

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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MITCHELL SHIRE COUNCIL

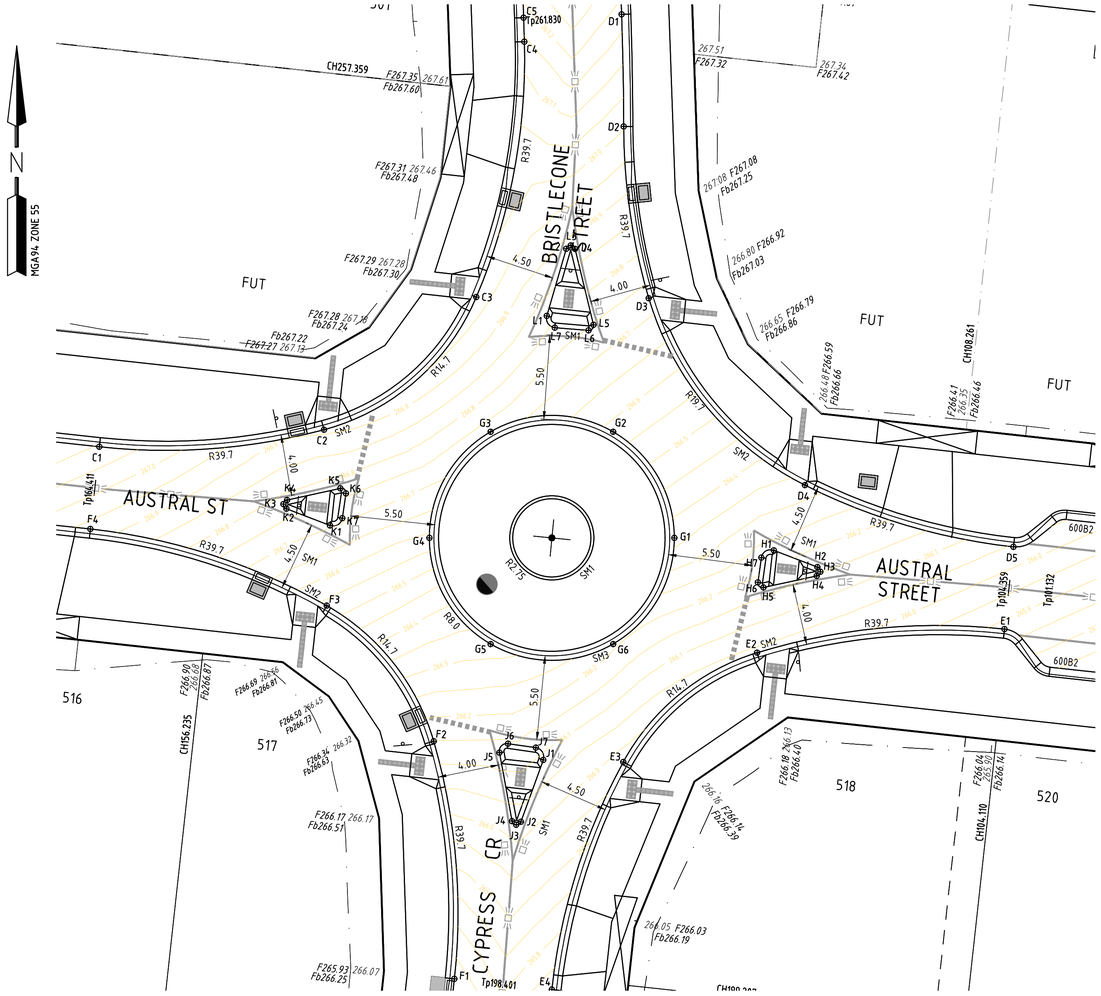
ARROWSMITH AND LITHGOW ST, BEVERIDGE
TIMBARRA ESTATE - STAGE 5

CROSS SECTIONS - 2

CYPRESS CRESCENT - BRISTLECONE STREET

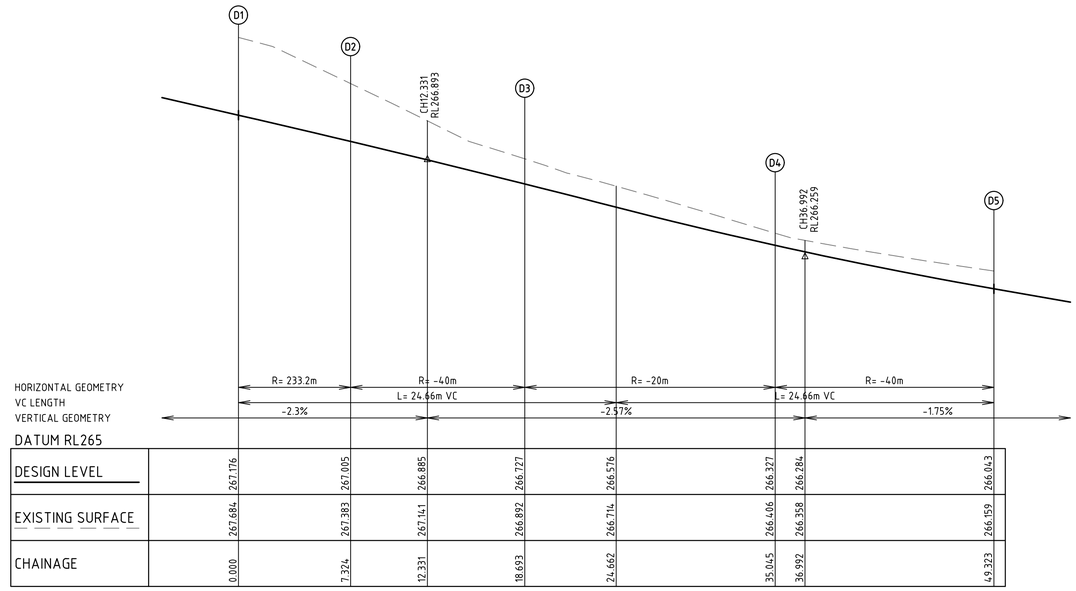
DRAWING No.	VERSION
5R9	A
REFERENCE	
23017E/5	
SHEET	
9 OF 17	

H:\23017\STAGE-5\CAD\DWG SET\ROAD AND DRAINAGE\23017E_5R3-9.DWG



ROUNDABOUT DETAIL

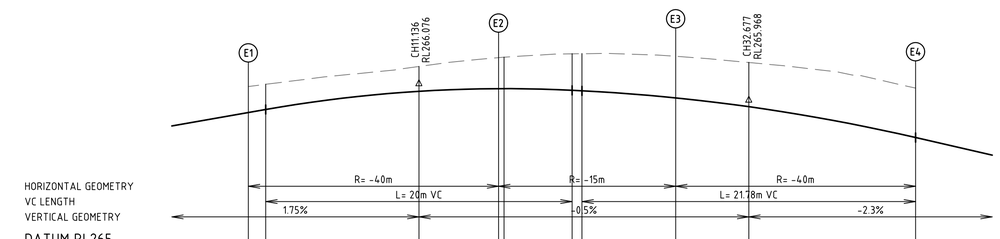
AUSTRAL STREET AND CYPRESS CRESCENT - BRISTLECONE STREET



DATUM RL265

DESIGN LEVEL	267.176	267.005	266.885	266.727	266.576	266.327	266.284	266.043
EXISTING SURFACE	267.684	267.383	267.141	266.892	266.714	266.406	266.358	266.159
CHAINAGE	0.000	7.324	12.331	18.693	24.662	35.045	36.992	49.323

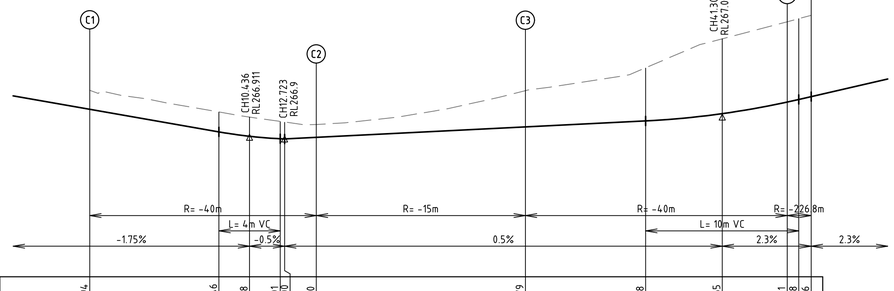
LIP LINE D



DATUM RL265

DESIGN LEVEL	265.881	265.901	266.020	266.037	266.026	265.977	265.919	265.718
EXISTING SURFACE	266.051	266.067	266.183	266.241	266.266	266.249	266.209	266.040
CHAINAGE	0.000	1.136	11.136	16.343	21.136	27.900	32.677	43.569

LIP LINE E



DATUM RL266

DESIGN LEVEL	267.094	266.946	266.918	266.901	266.910	266.979	267.018	267.065	267.141	267.158	267.176
EXISTING SURFACE	267.217	267.074	267.042	267.013	267.009	266.995	267.363	267.554	267.665	267.686	267.707
CHAINAGE	0.000	8.436	10.436	12.436	12.723	14.797	28.447	36.303	41.303	45.541	46.303	47.111

LIP LINE C

ALIGNMENT C

PT NO	EASTING	NORTHING	RL
C1	320154.647	5850983.805	267.094
C2	320169.317	5850984.922	266.910
C3	320179.264	5850993.575	266.979
C4	320182.404	5851010.247	267.141
C5	320182.356	5851011.816	267.176

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
C1 - C2	21.195	40.000	14.797	0.682	0.511	3.694	3.662	3.699	266.965
C2 - C3	52.140	15.000	13.650	1.526	1.140	3.383	3.209	3.413	266.944
C3 - C4	24.486	40.000	17.094	0.910	0.682	4.265	4.217	4.274	267.022
C4 - C5	0.397	226.800	1.570	0.001	0.001	0.392	0.392	0.392	267.158

ALIGNMENT D

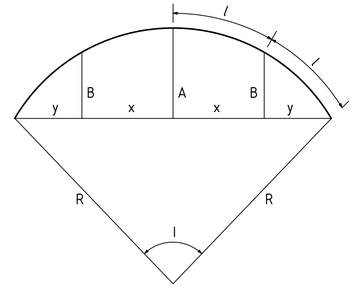
PT NO	EASTING	NORTHING	RL
D1	320188.752	5851012.036	267.176
D2	320188.889	5851004.713	267.005
D3	320190.528	5850993.502	266.727
D4	320200.723	5850981.300	266.327
D5	320214.343	5850977.274	266.043

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
D1 - D2	1.799	233.200	7.324	0.029	0.022	1.831	1.831	1.831	267.092
D2 - D3	16.285	40.000	11.369	0.403	0.302	2.840	2.825	2.842	266.868
D3 - D4	46.845	20.000	16.352	1.648	1.232	4.060	3.891	4.088	266.520
D4 - D5	20.452	40.000	14.278	0.635	0.476	3.565	3.536	3.570	266.177

ALIGNMENT E

PT NO	EASTING	NORTHING	RL
E1	320213.755	5850971.906	265.881
E2	320197.600	5850970.361	266.037
E3	320188.868	5850963.230	265.977
E4	320184.195	5850948.379	265.718

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
E1 - E2	23.409	40.000	16.343	0.832	0.623	4.079	4.036	4.086	265.996
E2 - E3	44.148	15.000	11.558	1.100	0.822	2.872	2.765	2.889	266.021
E3 - E4	22.443	40.000	15.668	0.765	0.573	3.911	3.873	3.917	265.873



LIP PROFILE SETOUT

SCALES

DETAILS 0 2 4 8 — Scale 1:200 @ A1

LIP SECTIONS 0 2 4 8 / 0 0.2 0.4 0.8 — Scale H 1:200 V 1:20 @ A1

WARNING

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PRELIMINARY PLAN ONLY

NOT APPROVED FOR CONSTRUCTION

VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

LEGEND

DRAIN, PROPERTY INLET & PIT
EX DRAIN & PIT
HOUSE DRAIN
SEWER AND MAINTENANCE HOLE
EX SEWER AND MAINTENANCE HOLE
WATER MAIN
EX WATER MAIN, VALVE & HYDRANT
GAS MAIN
EX GAS MAIN, VALVE
COMMS SERVICES & PITS
EX COMMS SERVICES & PITS
RECYCLED WATER
EX RECYCLED WATER
ELECTRICAL U.G. SERVICES
EX ELECTRICAL U.G. SERVICES
ELECTRICAL SERVICE & PIT
EX ELECTRICAL ASSETS
EX ELECTRICAL OVERHEADS
GAS & WATER CONDUITS
TOP OF BATTER
TOE OF BATTER
F FINISHED SURFACE AFTER CUTTING OR FILLING
Fb TOP OF PROPOSED BATTER
P PROPOSED PAVEMENT OR FOOTPATH SURFACE
IL EXISTING OR PROPOSED INVERT LEVEL OF PIPE OR OPEN DRAIN
TP TANGENT POINT
CH CHAINAGE
PSM
STREET SIGN
DRAINAGE PIT No.
TBM
EX FENCE
EX WALL OR BUILDING

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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MITCHELL SHIRE COUNCIL

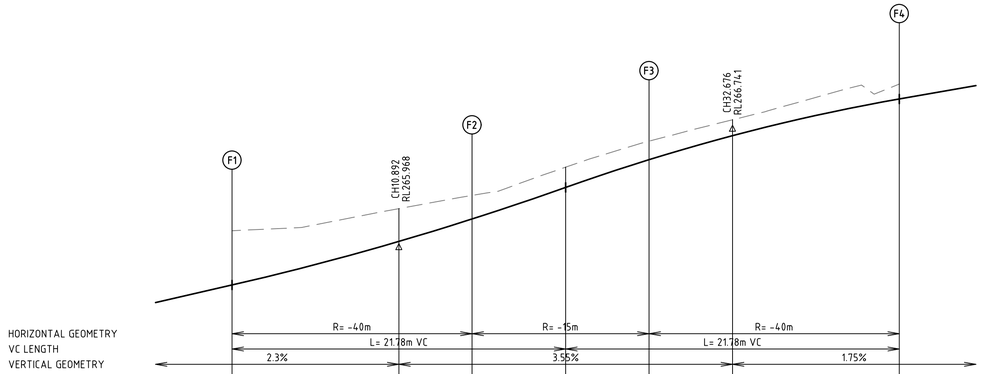
ARROWSMITH AND LITHGOW ST, BEVERIDGE

TIMBARRA ESTATE - STAGE 5

INTERSECTION DETAILS AND KERB SET OUT - 1

DRAWING No.	VERSION
5R10	A
REFERENCE	
23017E/5	
SHEET	
10 OF 17	

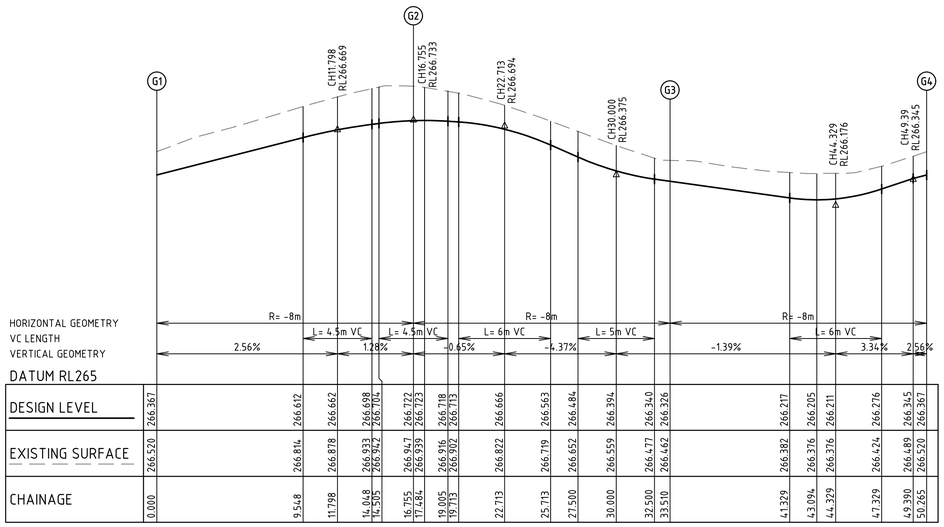
H:\23017\STAGE-5\CAD\DWG SET\ROAD AND DRAINAGE\23017E_5R2_10-12_17.DWG



DATUM RL265

DESIGN LEVEL	265.718	266.002	266.149	266.355	266.536	266.692	266.932
EXISTING SURFACE	266.072	266.217	266.303	266.488	266.657	266.799	267.030
CHAINAGE	0.000	10.892	15.668	21.784	27.226	32.676	43.568

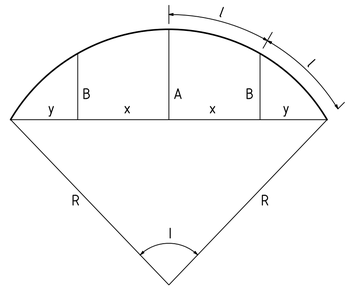
LIP LINE F



DATUM RL265

DESIGN LEVEL	266.367	266.612	266.662	266.698	266.704	266.722	266.723	266.718	266.713	266.666	266.563	266.484	266.394	266.340	266.326	266.217	266.205	266.211	266.276	266.345	266.367
EXISTING SURFACE	266.520	266.814	266.878	266.933	266.942	266.947	266.939	266.916	266.902	266.822	266.719	266.652	266.559	266.477	266.462	266.382	266.376	266.376	266.424	266.489	266.520
CHAINAGE	0.000	9.548	11.798	14.048	14.505	16.755	17.484	19.005	19.713	22.713	25.713	27.500	30.000	32.500	33.510	41.329	43.094	44.329	47.329	49.390	50.265

LIP LINE G



LIP PROFILE SETOUT

ALIGNMENT F

PT NO	EASTING	NORTHING	RL
F1	320177.833	5850949.076	265.718
F2	320176.483	5850964.585	266.149
F3	320169.499	5850973.436	266.536
F4	320154.060	5850978.437	266.932

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
F1 - F2	22.443	40.000	15.668	0.765	0.573	3.911	3.873	3.917	265.916
F2 - F3	44.148	15.000	11.558	1.100	0.822	2.872	2.765	2.890	266.343
F3 - F4	23.408	40.000	16.342	0.832	0.623	4.078	4.036	4.086	266.762

ALIGNMENT G

PT NO	EASTING	NORTHING	RL
G1	320192.201	5850977.856	266.367
G2	320188.201	5850984.784	266.582
G3	320180.201	5850984.784	266.722
G4	320176.201	5850977.856	266.587
G5	320180.201	5850970.927	266.326
G6	320188.201	5850970.927	266.211

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
G1 - G2	60.000	8.000	8.378	1.072	0.799	2.071	1.929	2.094	266.474
G2 - G3	60.000	8.000	8.378	1.072	0.799	2.071	1.929	2.094	266.676
G3 - G4	60.000	8.000	8.378	1.072	0.799	2.071	1.929	2.094	266.701
G4 - G5	60.000	8.000	8.378	1.072	0.799	2.071	1.929	2.094	266.415
G5 - G6	60.000	8.000	8.378	1.072	0.799	2.071	1.929	2.094	266.268
G6 - G1	60.000	8.000	8.378	1.072	0.799	2.071	1.929	2.094	266.240

MEDIANS

KERB SET OUT

ALIGNMENT H

PT NO	EASTING	NORTHING	RL
H1	320198.693	5850977.043	266.232
H2	320201.542	5850975.954	266.161
H3	320201.734	5850975.651	266.153
H4	320201.499	5850975.380	266.145
H5	320198.016	5850974.620	266.170
H6	320197.655	5850974.956	266.186
H7	320197.885	5850976.567	266.232

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
H2 - H3	73.385	0.300	0.384	0.059	0.044	0.094	0.085	0.096	266.157
H3 - H4	73.385	0.300	0.384	0.059	0.044	0.094	0.085	0.096	266.149
H5 - H6	110.418	0.300	0.578	0.129	0.095	0.139	0.107	0.145	266.178
H7 - H1	102.812	0.600	1.077	0.226	0.166	0.260	0.209	0.269	266.232

ALIGNMENT J

PT NO	EASTING	NORTHING	RL
J1	320183.635	5850963.366	266.089
J2	320182.178	5850959.323	266.027
J3	320181.871	5850959.126	266.020
J4	320181.601	5850959.371	266.022
J5	320180.775	5850963.837	266.128
J6	320181.338	5850964.422	266.146
J7	320183.156	5850964.163	266.117

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
J2 - J3	74.852	0.300	0.392	0.062	0.046	0.096	0.086	0.098	266.024
J3 - J4	74.852	0.300	0.392	0.062	0.046	0.096	0.086	0.098	266.021
J5 - J6	108.585	0.500	0.948	0.208	0.153	0.228	0.178	0.237	266.137
J7 - J1	101.711	0.600	1.065	0.221	0.163	0.258	0.208	0.266	266.103

ALIGNMENT K

POINT NO	EASTING	NORTHING	RL
K1	320169.711	5850978.672	266.705
K2	320166.862	5850979.758	266.770
K3	320166.669	5850980.061	266.782
K4	320166.904	5850980.331	266.786
K5	320170.387	5850981.094	266.773
K6	320170.748	5850980.759	266.758
K7	320170.519	5850979.148	266.709

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
K2 - K3	73.388	0.300	0.384	0.059	0.044	0.094	0.085	0.096	266.776
K3 - K4	73.388	0.300	0.384	0.059	0.044	0.094	0.085	0.096	266.785
K5 - K6	110.475	0.300	0.578	0.129	0.095	0.139	0.107	0.145	266.767
K7 - K1	102.748	0.600	1.076	0.225	0.166	0.260	0.209	0.269	266.703

ALIGNMENT L

PT NO	EASTING	NORTHING	RL
L1	320183.864	5850992.350	266.822
L2	320185.138	5850996.732	266.885
L3	320185.433	5850996.948	266.884
L4	320185.718	5850996.719	266.874
L5	320186.914	5850991.770	266.747
L6	320186.598	5850991.401	266.745
L7	320184.391	5850991.584	266.792

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
L2 - L3	75.100	0.300	0.393	0.062	0.046	0.097	0.086	0.098	266.885
L3 - L4	75.100	0.300	0.393	0.062	0.046	0.097	0.086	0.098	266.879
L5 - L6	108.345	0.300	0.567	0.124	0.091	0.137	0.107	0.142	266.746
L7 - L1	101.455	0.600	1.062	0.220	0.162	0.257	0.207	0.266	266.807

SCALE

LIP SECTIONS
0 2 4 8
0 0.2 0.4 0.8
Scale H 1:200 V 1:20 @ A1

WARNING

BEWARE OF UNDERGROUND SERVICES

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

LEGEND

DRAIN, PROPERTY INLET & PIT
EX DRAIN & PIT
HOUSE DRAIN
SEWER AND MAINTENANCE HOLE
EX SEWER AND MAINTENANCE HOLE
WATER MAIN
EX WATER MAIN, VALVE & HYDRANT
GAS MAIN
EX GAS MAIN, VALVE
COMMS SERVICES & PITS
EX COMMS SERVICES & PITS
RECYCLED WATER
EX RECYCLED WATER
ELECTRICAL U.G. SERVICES
EX ELECTRICAL U.G. SERVICES
ELECTRICAL SERVICE & PIT
EX ELECTRICAL ASSETS
EX ELECTRICAL OVERHEADS
GAS & WATER CONDUITS
TOP OF BATTER
TOE OF BATTER
LIGHT POLE PIT
F FINISHED SURFACE AFTER CUTTING OR FILLING
Fb TOP OF PROPOSED BATTER
P PROPOSED PAVEMENT OR FOOTPATH SURFACE
IL EXISTING OR PROPOSED INVERT LEVEL OF PIPE OR OPEN DRAIN
TP TANGENT POINT
CH CHAINAGE
PSM
STREET SIGN
DRAINAGE PIT No.
TBM
EX FENCE
EX WALL OR BUILDING

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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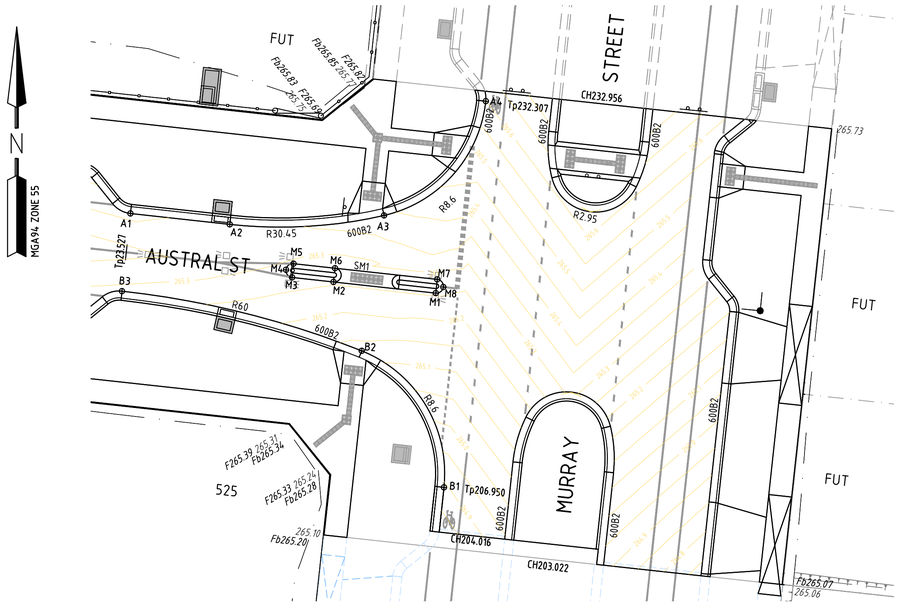
MITCHELL SHIRE COUNCIL
ARROWSMITH AND LITHGOW ST, BEVERIDGE
TIMBARRA ESTATE - STAGE 5
INTERSECTION DETAILS
AND KERB SET OUT - 2

DRAWING No.	VERSION
5R11	A
REFERENCE	
23017E/5	
SHEET	
11 OF 17	



INTERSECTION DETAIL
CARRICK AVENUE AND HERTFORD PLACE

ALIGNMENT A

PT NO	EASTING	NORTHING	RL
A1	320294.679	5850968.332	265.287
A2	320301.162	5850967.623	265.322
A3	320311.237	5850968.203	265.390
A4	320317.877	5850975.662	265.598

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
A2 – A3	19.077	30.450	10.139	0.421	0.316	2.532	2.514	2.535	265.351
A3 – A4	70.988	8.600	10.655	1.598	1.189	2.621	2.372	2.664	265.472

ALIGNMENT B

PT NO	EASTING	NORTHING	RL
B1	320315.148	5850950.452	264.891
B2	320309.777	5850959.369	265.128
B3	320294.124	5850963.263	265.287

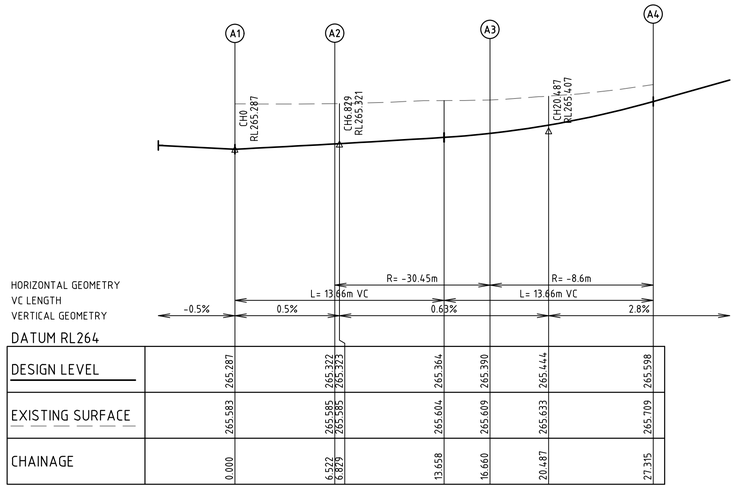
CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
B1 – B2	74.485	8.600	11.180	1.754	1.304	2.746	2.459	2.795	265.025
B2 – B3	15.449	60.000	16.178	0.544	0.408	4.042	4.023	4.045	265.227

MEDIAN
KERB SET OUT

ALIGNMENT M

PT NO	EASTING	NORTHING	RL
M1	320314.609	5850963.134	265.256
M2	320307.936	5850963.864	265.255
M3	320305.232	5850964.160	265.273
M4	320304.833	5850964.656	265.288
M5	320305.329	5850965.055	265.295
M6	320308.034	5850964.759	265.278
M7	320314.706	5850964.028	265.281
M8	320315.105	5850963.533	265.265

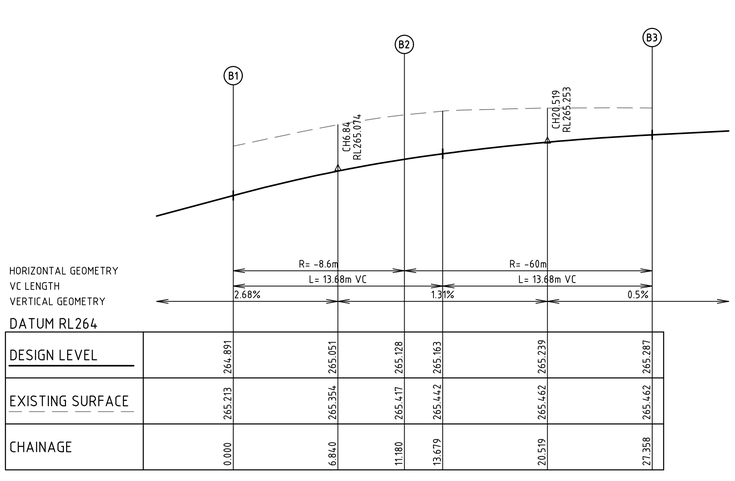
CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
M3 – M4	90.000	0.450	0.707	0.132	0.098	0.172	0.146	0.177	265.281
M4 – M5	90.000	0.450	0.707	0.132	0.098	0.172	0.146	0.177	265.292
M7 – M8	90.000	0.450	0.707	0.132	0.098	0.172	0.146	0.177	265.273
M8 – M1	90.000	0.450	0.707	0.132	0.098	0.172	0.146	0.177	265.260



DATUM RL264

DESIGN LEVEL	265.287	265.322	265.323	265.364	265.390	265.444	265.598
EXISTING SURFACE	265.583	265.585	265.585	265.604	265.609	265.633	265.709
CHAINAGE	0.000	6.522	6.829	13.658	16.660	20.487	27.315

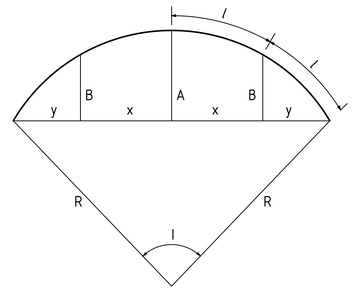
LIP LINE A



DATUM RL264

DESIGN LEVEL	264.891	265.051	265.128	265.163	265.239	265.287
EXISTING SURFACE	265.213	265.354	265.417	265.442	265.462	265.462
CHAINAGE	0.000	6.840	11.180	13.679	20.519	27.358

LIP LINE B



LIP PROFILE SETOUT

SCALES

DETAILS
0 2 4 8
Scale 1:200 @ A1

LIP SECTIONS
0 2 4 8
0 0.2 0.4 0.8
Scale H 1:200 V 1:20 @ A1

WARNING

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PRELIMINARY PLAN ONLY
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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

LEGEND

- DRAIN, PROPERTY INLET & PIT
- EX DRAIN & PIT
- HOUSE DRAIN
- S — SEWER AND MAINTENANCE HOLE
- ExS — EX SEWER AND MAINTENANCE HOLE
- W — WATER MAIN
- ExW — FH — EX WATER MAIN, VALVE & HYDRANT
- G — GAS MAIN
- ExG — EX GAS MAIN, VALVE
- T — COMMS SERVICES & PITS
- ExT — EX COMMS SERVICES & PITS
- RW — RECYCLED WATER
- ExRW — EX RECYCLED WATER
- E — ELECTRICAL U.G. SERVICES
- ExE — EX ELECTRICAL U.G. SERVICES
- E — ELECTRICAL SERVICE & PIT
- LIGHT POLE PIT — EX ELECTRICAL ASSETS
- EX ELECTRICAL OVERHEADS
- GW — GAS & WATER CONDUITS
- TOP OF BATTER
- TOE OF BATTER
- EX FENCE
- EX WALL OR BUILDING

F	FINISHED SURFACE AFTER CUTTING OR FILLING
Fb	TOP OF PROPOSED BATTER
P	PROPOSED PAVEMENT OR FOOTPATH SURFACE
IL	EXISTING OR PROPOSED INVERT LEVEL OF PIPE OR OPEN DRAIN
TP	TANGENT POINT
CH	CHAINAGE
	PSM
	STREET SIGN
2	DRAINAGE PIT No.
	TBM

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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TIMBARRA ESTATE - STAGE 5
INTERSECTION DETAILS
AND KERB SET OUT - 3

DRAWING No.	VERSION
5R12	A
REFERENCE	
23017E/5	
SHEET	
12 OF 17	

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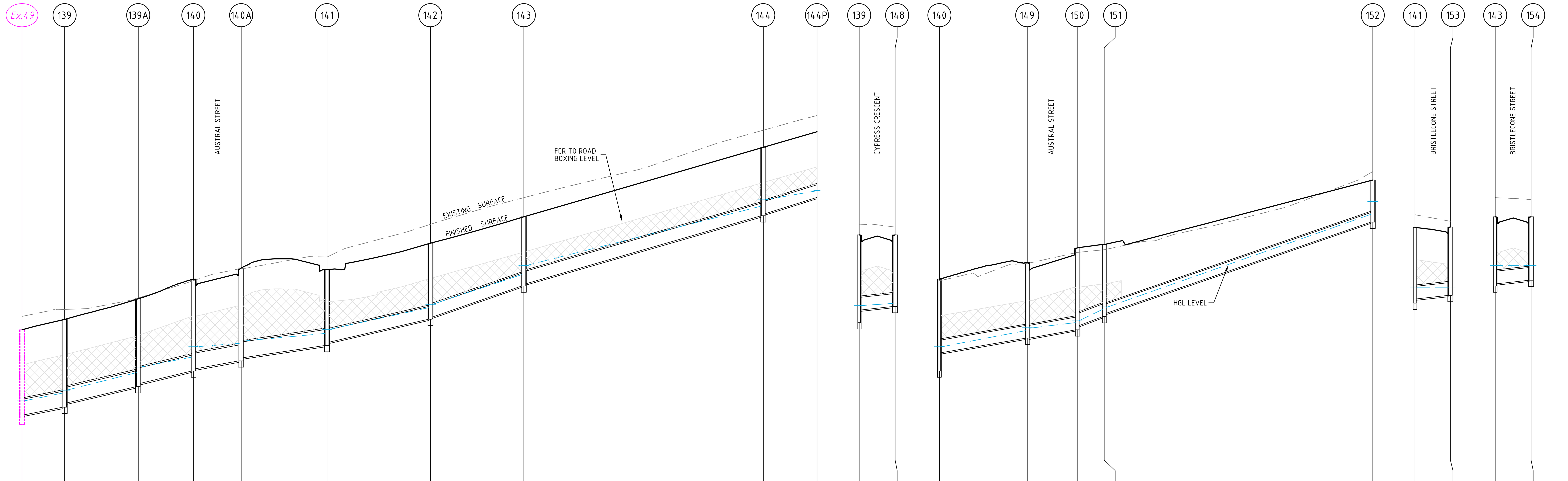

Pipe segments

From	To	Design flow Qa (m3/s)	Flow capacity Qf (m3/s)	Capacity velocity Vf (m/s)	Pipe size (mm)	Type	Grade	Grade %	Length
Ex.49	139	0.22	0.23	2.12	375Ø	RCP 2	1 in 55.8	1.8%	10.093
139	139A	0.21	0.26	2.36	375Ø	RCP 2	1 in 45	2.2%	17.433
139A	140	0.20	0.26	2.38	375Ø	RCP 2	1 in 44.3	2.3%	13.071
140	140A	0.15	0.23	2.04	375Ø	RCP	1 in 60	1.7%	11.311
140A	141	0.15	0.21	1.89	375Ø	RCP 2	1 in 70.1	1.4%	20.313
141	142	0.13	0.14	2.04	300Ø	RCP 2	1 in 45	2.2%	24.501
142	143	0.13	0.18	2.50	300Ø	RCP 2	1 in 30	3.3%	22.133
143	144	0.09	0.16	2.31	300Ø	RCP 2	1 in 35.2	2.8%	56.724
144	144P	0.04	0.17	2.38	300Ø	RCP 2	1 in 33.1	3%	12.720
139	148	0.01	0.10	1.37	300Ø	RCP 2	1 in 100	1%	8.500
140	149	0.05	0.12	1.77	300Ø	RCP	1 in 60	1.7%	20.810
149	150	0.05	0.12	1.77	300Ø	RCP	1 in 60	1.7%	11.837
150	151	0.05	0.18	2.50	300Ø	RCP 2	1 in 30	3.3%	6.389
151	152	0.05	0.08	2.08	225Ø	RCP 2	1 in 29.4	3.4%	63.620
141	153	0.01	0.10	1.37	300Ø	RCP 2	1 in 100	1%	8.369
143	154	0.01	0.10	1.37	300Ø	RCP 2	1 in 100	1%	8.500

Pit values

Datum: 260.0 (Ex.49–144P); 258.0 (139–148); 260.0 (140–152); 259.0 (141–153); 260.0 (143–154)

Section	Pit	Depth to invert (in)	Depth to invert (out)	Hydraulic grade line (in)	Hydraulic grade line (out)	Invert (in)	Invert (out)	Finished surface	(Existing surface)	Chainage
1	Ex.49	2.088	2.013	263.899		263.495	263.570	265.583	(265.900)	0.000
1	139	2.077	1.977	264.086	264.154	263.751	263.851	265.828	(266.064)	10.093
1	139A	2.079	2.004	264.568	264.699	264.239	264.314	266.317	(266.333)	27.526
1	140	2.172	2.122	264.935	265.193 265.179	264.609	264.659	266.781	(266.745)	40.597
1	140A	2.198	2.123	265.262	265.316	264.848	264.923	267.046	(267.034)	51.908
1	141	1.794	1.719	265.495	265.592 265.591	265.212	265.287	267.006	(267.304)	72.221
1	142	1.798	1.748	266.104	266.185	265.832	265.882	267.630	(268.078)	96.722
1	143	1.636	1.586	266.888	267.100	266.620	266.670	268.256	(268.709)	118.855
1	144	1.621	1.571	268.509	268.658	268.280	268.330	269.901	(270.304)	175.579
1	144P	1.553		268.871	268.880	268.714		270.268	(270.652)	188.299
2	139	2.077	1.777	264.086	264.154	263.751	264.050	265.828	(266.064)	0.000
2	148	1.692		264.208	264.214	264.135		265.828	(266.013)	8.500
3	140	2.172	1.742	264.935	265.193 265.179	264.609	265.038	266.781	(266.745)	0.000
3	149	1.790	1.790	265.562	265.632 265.619	265.385	265.385	267.176	(267.155)	20.810
3	150	1.936	1.836	265.752	265.810 265.799	265.583	265.683	267.519	(267.413)	32.648
3	151	1.703	1.628	266.063	266.124 266.109	265.896	265.971	267.599	(267.477)	39.037
3	152	0.995		268.314	268.617	268.131		269.126	(269.327)	102.656
4	141	1.794	1.694	265.495	265.592 265.591	265.212	265.312	267.006	(267.304)	0.000
4	153	1.619		265.591	265.594	265.396		267.015	(267.150)	8.369
5	143	1.636	1.586	266.888	267.100	266.620	266.670	268.256	(268.709)	0.000
5	154	1.501		267.101	267.106	266.755		268.256	(268.661)	8.500

0 5 10 20
0 0.5 1 2
Scale H 1:500 V 1:50 @ A1

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

LEGEND

- EXISTING SURFACE (grey dashed line)
- FINISHED SURFACE (solid line)
- HYDRAULIC GRADE LINE (blue dashed line)
- DENOTES CLASS 2 FCR BACKFILL (hatched box)

0 5 10 20
0 0.5 1 2
Scale H 1:500 V 1:50 @ A1
Scale H 1:1000 V 1:100 @ A3

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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TIMBARRA ESTATE - STAGE 5
DRAINAGE LONGITUDINAL SECTIONS - 1

DRAWING No. 5R13 VERSION A
REFERENCE 23017E/5

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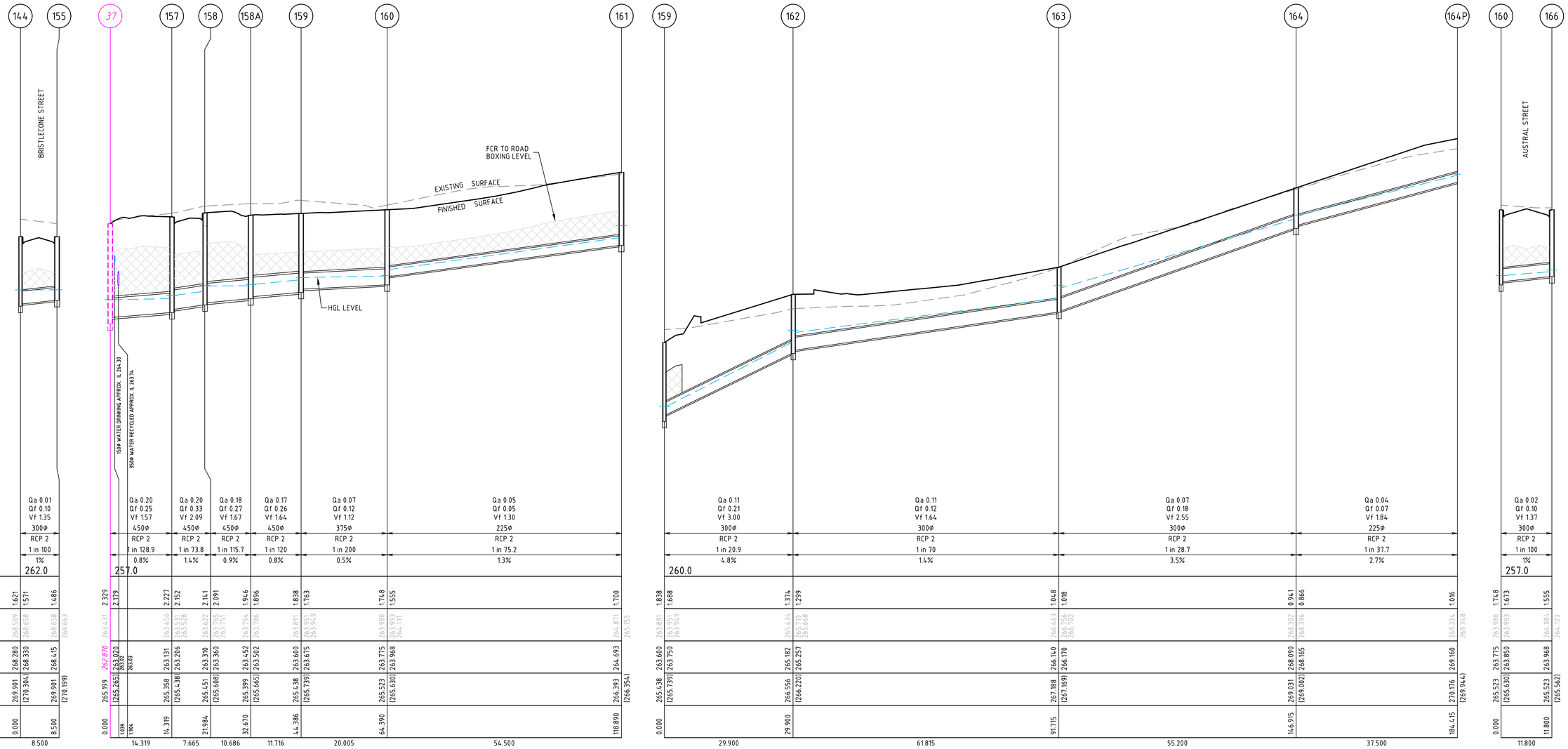

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

LEGEND

EXISTING SURFACE
FINISHED SURFACE
HYDRAULIC GRADE LINE
DENOTES CLASS 2 FCR BACKFILL

0 5 10 20
0 0.5 1 2
Scale H 1:500 V 1:50 @ A1
Scale H 1:1000 V 1:100 @ A3

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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TIMBARRA ESTATE - STAGE 5

DRAINAGE LONGITUDINAL SECTIONS - 2

DRAWING No.	VERSION
5R14	A
REFERENCE	
23017E/5	
SHEET	
14 OF 17	

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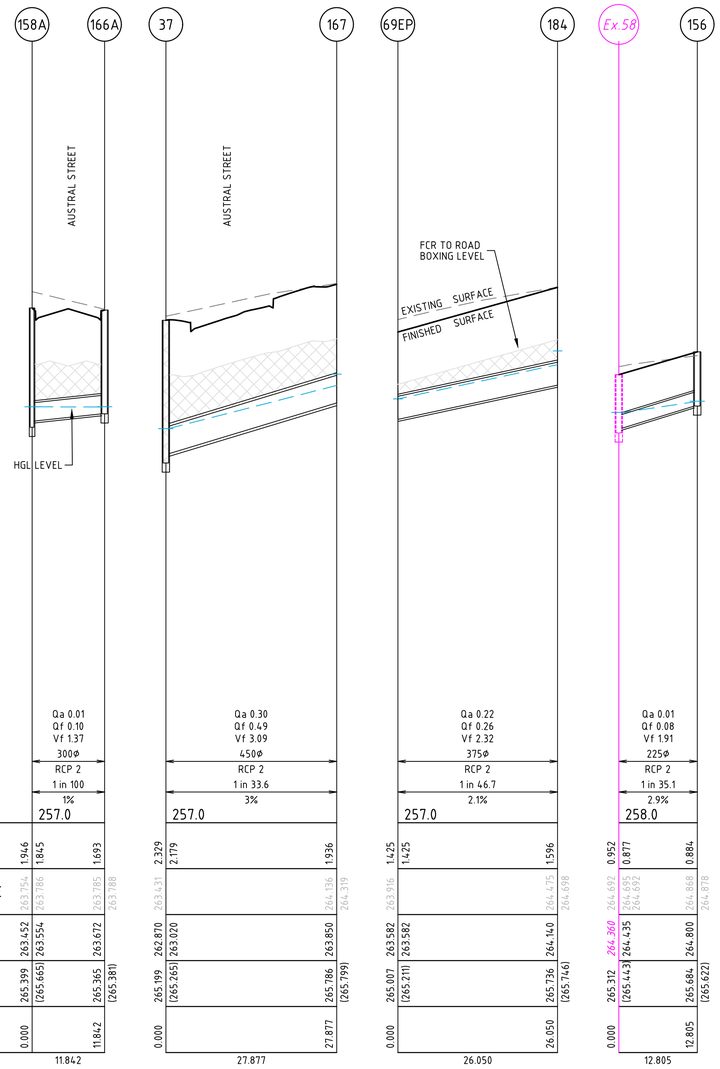


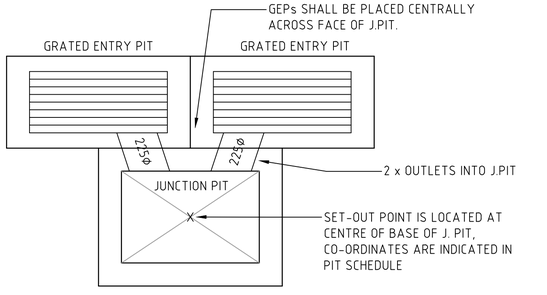
DESIGN FLOW (m3/s)		Qa 0.01	Qa 0.30	Qa 0.22	Qa 0.01
FLOW CAPACITY (m3/s)		Qf 0.10	Qf 0.49	Qf 0.26	Qf 0.08
CAPACITY VELOCITY (m/s)		Vf 1.37	Vf 3.09	Vf 2.32	Vf 1.91
PIPE SIZE (mm) & TYPE		300ø RCP 2	450ø RCP 2	375ø RCP 2	225ø RCP 2
GRADE		1 in 100 1%	1 in 33.6 3%	1 in 46.7 2.1%	1 in 35.1 2.9%
DATUM		257.0	257.0	257.0	258.0
DEPTH TO INVERT		1.946 1.845 1.693	2.329 2.179 1.936	1.425 1.425 1.596	0.952 0.877 0.884
HYDRAULIC GRADE LINE		263.754 263.786 263.785 263.788	263.431 264.136 264.319	263.916 264.475 264.698	264.692 264.695 264.692 264.868 264.878
INVERT		263.452 263.554 263.672	262.870 263.020 263.850	263.582 263.582 264.140	264.360 264.435 264.800
FINISHED SURFACE (EXISTING SURFACE)		265.399 (265.665) 265.365 (265.381)	265.199 (265.265) 265.786 (265.799)	265.007 (265.211) 265.736 (265.746)	265.312 (265.443) 265.684 (265.622)
CHAINAGE		0.000 11.842	0.000 27.877	0.000 26.050	0.000 12.805
		11.842	27.877	26.050	12.805

PIT				INTERNAL		INLET		OUTLET		PIT		EDCM	REMARKS
NAME	TYPE	EASTING	NORTHING	WD	LEN	DIA	INV LEV	DIA	INV LEV	SETOUT RL	DEPTH	STANDARD DRAWING	
49	Ex.GEP	320175.626	5850938.560			375	263.57			265.583	2.088		CONNECT TO EXISTING DRAINAGE PIT-49 STUB
139	GEP	320176.724	5850948.593	0.6	0.9	375	263.851	375	263.751	265.828	2.077	EDCM 601	
						300	264.05						MODIFY COVER TO GEP. CONNECT TO EXISITING DRAIN PIPE
139A	GEP	320174.873	5850965.928	0.6	0.9	375	264.314	375	264.239	266.317	2.079	EDCM 601	
140	GEP	320165.000	5850974.493	0.6	0.9	375	264.659	375	264.609	266.781	2.172	EDCM 601	MODIFY COVER TO GEP
						300	265.038						
140A	GEP	320167.416	5850985.543	0.6	0.9	375	264.923	375	264.848	267.046	2.198	EDCM 601	MODIFY COVER TO GEP
141	GEP	320181.796	5850999.890	0.6	0.9	300	265.287	375	265.212	267.006	1.794	EDCM 601	
						300	265.312						DOUBLE GEP, CLASS D COVER
142	GEP	320180.872	5851024.374	0.6	0.9	300	265.882	300	265.832	267.63	1.798	EDCM 601	DOUBLE GEP
143	GEP	320181.697	5851046.491	0.6	0.9	300	266.67	300	266.62	268.256	1.636	EDCM 601	PROVIDE BLOCKOUT FOR FUTURE PIPE CONNECTION
						300	266.67						
144	GEP	320187.867	5851102.879	0.6	0.9	300	268.33	300	268.28	269.901	1.621	EDCM 601	
						300	268.33						
144P	END PIPE	320189.338	5851115.513					300	268.714	270.268	1.553		BLOCK AND SEAL ENDPIPE FOR FUTURE PIPE CONNECTION
148	GEP	320185.174	5850947.669	0.6	0.9			300	264.135	265.828	1.692	EDCM 601	
149	GEP	320144.267	5850976.290	0.6	0.9	300	265.385	300	265.385	267.176	1.79	EDCM 601	
150	GEP	320144.617	5850988.122	0.6	0.9	300	265.683	300	265.583	267.519	1.936	EDCM 601	
151	JP	320138.266	5850988.817	0.6	0.9	225	265.971	300	265.896	267.599	1.703	EDCM 605	
152	JP	320145.186	5851052.059	0.6	0.9			225	268.131	269.126	0.995	EDCM 605	
153	GEP	320190.154	5851000.329	0.6	0.9			300	265.396	267.015	1.619	EDCM 601	
154	GEP	320190.147	5851045.567	0.6	0.9			300	266.755	268.256	1.501	EDCM 601	
155	GEP	320196.317	5851101.954	0.6	0.9			300	268.415	269.901	1.486	EDCM 601	
58	Ex.JP	320208.919	5850934.610			225	264.435			265.312	0.952		CONNECT TO EXISTING DRAINAGE PIT-58 STUB
156	JP	320210.312	5850947.339	0.6	0.9			225	264.8	265.684	0.884	EDCM 605	
37	Ex.JP	320312.365	5850952.622	0.9	0.9	450	263.02			265.199	2.329		CONNECT TO EXISTING DRAINAGE PIT-37 STUB
		320312.365	5850952.622			450	263.02						CONNECT TO EXISTING DRAINAGE PIT-37 STUB
157	GEP	320300.802	5850961.068	0.6	0.9	450	263.206	450	263.131	265.358	2.227	EDCM 601	
158	GEP	320300.680	5850968.732	0.6	0.9	450	263.36	450	263.31	265.451	2.141	EDCM 601	TEMPORARY BLOCK AND SEAL DRAIN INLET
						375	*263.181*						*TEMPRARY DRAIN OUTLET FROM TEMPORARY RB-E*
158A	GEP	320290.557	5850972.153	0.6	0.9	450	263.502	450	263.452	265.399	1.946	EDCM 601	TEMPORARY BLOCK AND SEAL DRAIN OUTLET
				0.6	0.9	300	263.554						
						450	*263.488*						*TEMPRARY DRAIN INLET TO TEMPORARY RB-E*
159	JP	320278.911	5850973.428	0.6	0.9	375	263.675	450	263.6	265.438	1.838	EDCM 605	
						300	263.75						
160	GEP	320259.025	5850975.604	0.6	0.9	225	263.968	375	263.775	265.523	1.748	EDCM 601	PROVIDE BLOCKOUT FOR FUTURE PIPE CONNECTION
						300	263.85						
161	JP	320204.848	5850981.532	0.6	0.9			225	264.693	266.393	1.7	EDCM 605	
162	JP	320282.129	5851003.154	0.6	0.9	300	265.257	300	265.182	266.556	1.374	EDCM 605	
163	JP	320220.681	5851009.878	0.6	0.9	300	266.17	300	266.14	267.188	1.048	EDCM 605	
164	JP	320226.685	5851064.750	0.6	0.9	225	268.165	300	268.09	269.031	0.941	EDCM 605	
164P	END PIPE	320230.764	5851102.028					225	269.16	270.176	1.016		BLOCK AND SEAL ENDPIPE FOR FUTURE PIPE CONNECTION
166	GEP	320257.741	5850963.874	0.6	0.9			300	263.968	265.523	1.555	EDCM 601	
166A	GEP	320289.269	5850960.381	0.6	0.9			300	263.672	265.365	1.693	EDCM 601	
167	END PIPE	320315.217	5850980.353					450	263.85	265.786	1.936		BLOCK AND SEAL ENDPIPE FOR FUTURE PIPE CONNECTION
69EP	Ex.EP	320333.622	5850950.344			375	263.582			265.007	1.425		CONNECT TO EXISTING ENDPIPE
184	END PIPE	320336.398	5850976.246					375	264.14	265.736	1.596		BLOCK AND SEAL ENDPIPE FOR FUTURE PIPE CONNECTION

PIT SCHEDULE NOTES

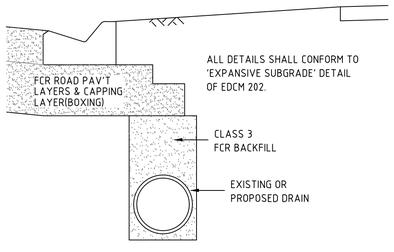
1. EASTING AND NORTHING REFER TO CENTRE OF BASE OF PIT UNLESS NOTED OTHERWISE
2. "SETOUT RL" REFERS TO FINISHED SURFACE LEVEL OF PIT UNLESS NOTED OTHERWISE, PIT LID TO BE ADJUSTED ON SITE TO SUIT CROSSFALL
3. "LEN" = LENGTH OF PIT AND REFERS TO THE INTERNAL DIMENSION PARALLEL TO BACK OF KERB, UNLESS NOTED OTHERWISE
4. "STD DWG" REFERS TO CURRENT COUNCIL STANDARD DRAWINGS UNLESS NOTED OTHERWISE
6. FOR ALL GRATED ENTRY PITS (GEP) & DOUBLE GEPs:
   THE INTERNAL DIMENSIONS OF THE JUNCTION PIT COMPONENT OF THE PIT ARE SHOWN IN THE PIT SCHEDULE.
   THE INTERNAL DIMENSIONS OF THE GRATED KERB COMPONENT OF THE PIT ARE 900x350 UNLESS NOTED OTHERWISE.
   THE "SETOUT RL" SHOWN REFERS TO THE JUNCTION PIT LID.
7. HAUNCHED PITS ARE HAUNCHED UNDER ROAD, UNLESS NOTED OTHERWISE IN PIT SCHEDULE.

ABBREVIATIONS:
GJP GRATED JUNCTION PIT
JP JUNCTION PIT
GEP GRATED ENTRY PIT
H HAUNCHED
DBL DOUBLE



NOTE: ALL OTHER DGEP PIT DETAILS SHALL CONFORM TO EDCM 602 OR 604 AS APPLIC.

DOUBLE GRATED ENTRY PIT (DBL-GEP)
TYPICAL PIT DETAIL
NOT TO SCALE



DRAINAGE TRENCH BACKFILL
TYPICAL DETAIL
NOT TO SCALE

WARNING

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

LEGEND
EXISTING SURFACE
FINISHED SURFACE
HYDRAULIC GRADE LINE
DENOTES CLASS 2 FCR BACKFILL

0 5 10 20
0 0.5 1 2
Scale H 1:500 V 1:50 @ A1
Scale H 1:1000 V 1:100 @ A3

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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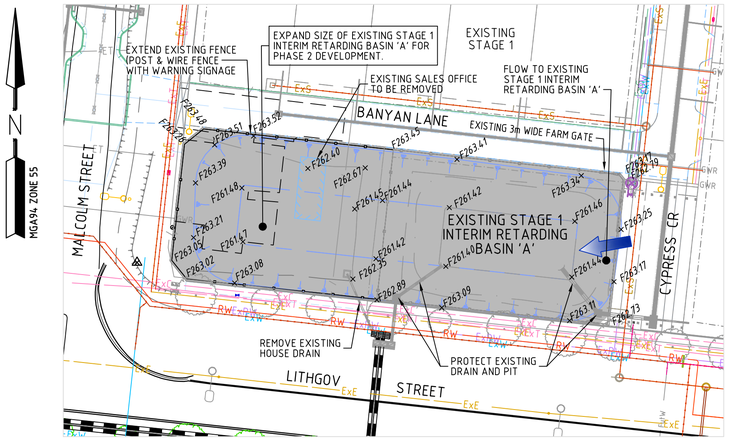
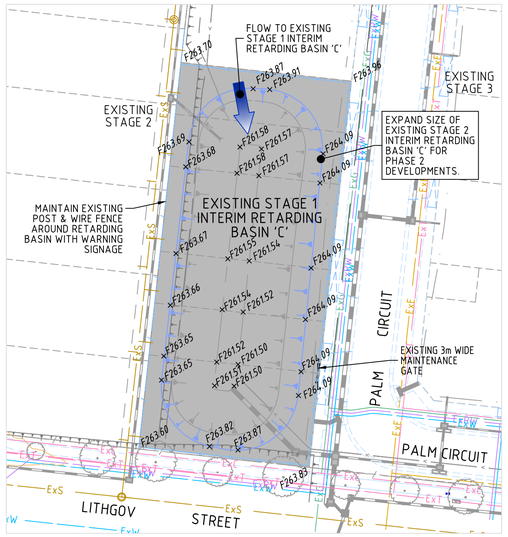
TIMBARRA ESTATE - STAGE 5
DRAINAGE LONGITUDINAL SECTIONS - 3 AND PIT SCHEDULE

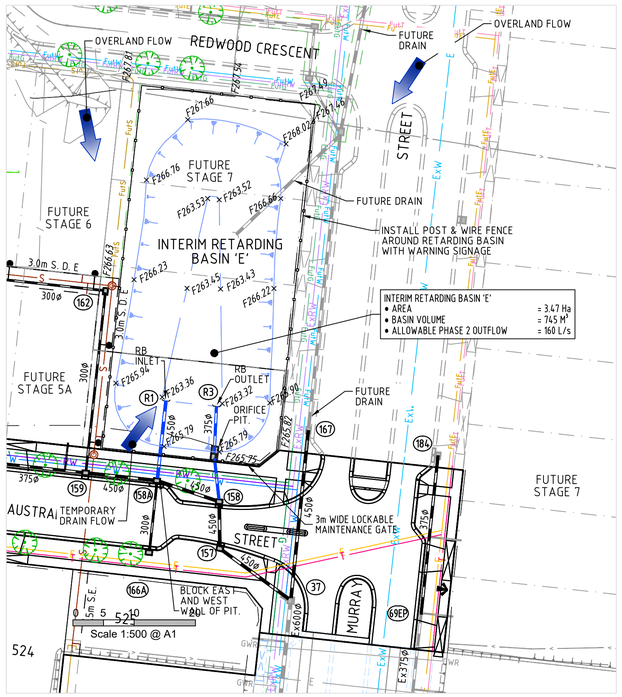
DRAWING No.	VERSION
5R15	A
REFERENCE	
23017E/5	
SHEET	
15 OF 17	



RETARDING BASIN 'A'

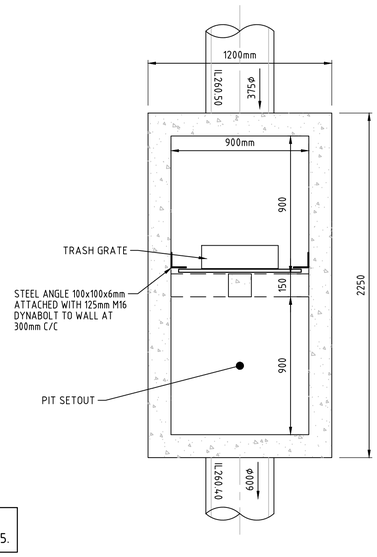


RETARDING BASIN 'C'



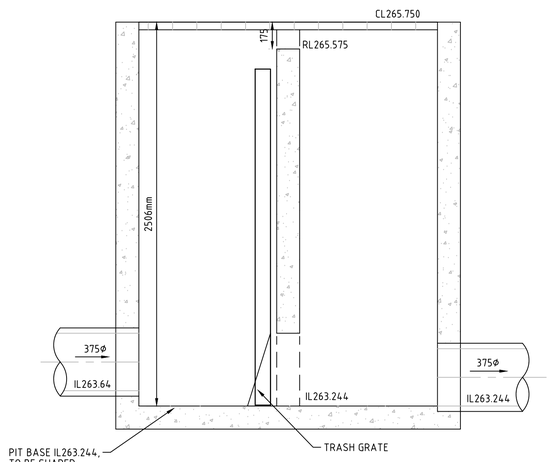
RETARDING BASIN 'E'

PIT				INTERNAL		INLET		OUTLET		PIT		EDCM	REMARKS
NAME	TYPE	EASTING	NORTHING	WD	LEN	DIA	INV LEV	DIA	INV LEV	SETOUT RL	DEPTH	STANDARD DRAWING	
158A	GEP	320290.557	5850972.153	0.6	0.9			450	263.488	265.399	1.911	EDCM 601	ROAD DRAINAGE PIT, TEMPORARY CONNECTION
R1	HEADWALL	320291.982	5850985.176			450	263.436			263.886	0.45		TEMPORARY SAND BAG HEADWALL.
R2	JP	320299.864	5850976.256	0.6	0.9	375	263.264	375	263.244	265.75	2.506	EDCM 605	ORIFICE PIT TO EDCM 605, REFER DETAIL.
R3	HEADWALL	320300.235	5850984.274					375	263.331	263.706	0.375		TEMPORARY SAND BAG HEADWALL.
158	GEP	320300.680	5850968.732	0.6	0.9	375	263.181			265.451	2.27	EDCM 601	ROAD DRAINAGE PIT, TEMPORARY CONNECTION

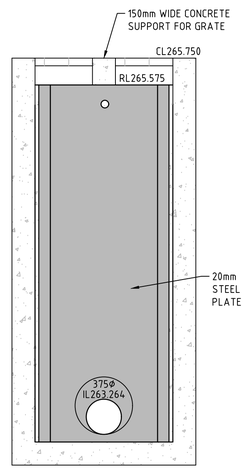


PIT R2 - PLAN VIEW

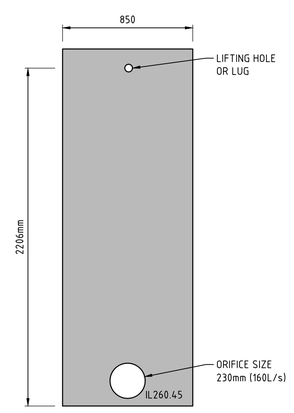
ORIFICE PIT R2:
CONSTRUCTION TO EDCM605.



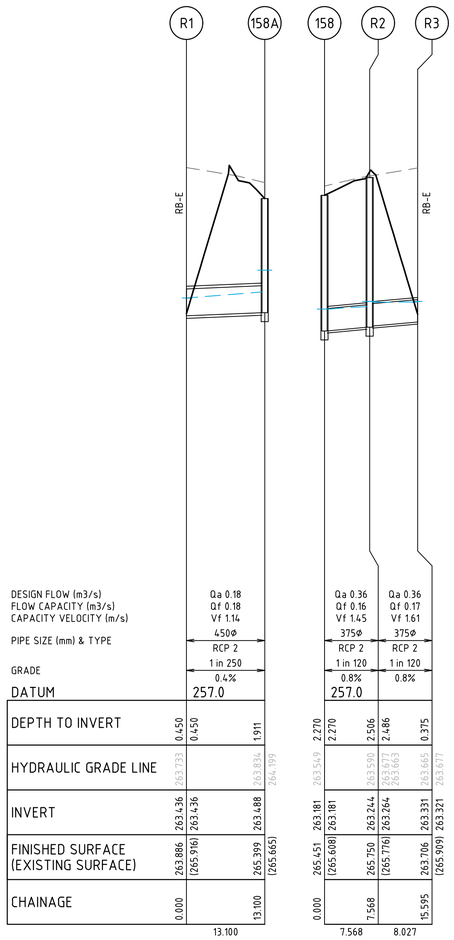
PIT R2 - SECTION



PIT R2 - SECTION



PIT R2 - ORIFICE PLATE



RB 'E' - DRAINAGE LONGITUDINAL SECTIONS

0 5 10 20
0 0.5 1 2
Scale H 1:500 V 1:50 @ A1

LEGEND

- EXISTING SURFACE
- FINISHED SURFACE
- HYDRAULIC GRADE LINE

WARNING

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VERSION	REMARKS		
A	PRELIMINARY ISSUE	13.10.22	JS

LEGEND

DRAIN, PROPERTY INLET & PIT; EX DRAIN & PIT; HOUSE DRAIN; SEWER AND MAINTENANCE HOLE; EX SEWER AND MAINTENANCE HOLE; WATER MAIN; EX WATER MAIN, VALVE & HYDRANT; GAS MAIN; EX GAS MAIN, VALVE; COMMS SERVICES & PITS; EX COMMS SERVICES & PITS

RECYCLED WATER; EX RECYCLED WATER; ELECTRICAL U.G. SERVICES; EX ELECTRICAL U.G. SERVICES; ELECTRICAL SERVICE & PIT; EX ELECTRICAL ASSETS; EX ELECTRICAL OVERHEADS; GAS & WATER CONDUITS; TOP OF BATTER; TOE OF BATTER

F FINISHED SURFACE AFTER CUTTING OR FILLING
Fb TOP OF PROPOSED BATTER
P PROPOSED PAVEMENT OR FOOTPATH SURFACE
IL EXISTING OR PROPOSED INVERT LEVEL OF PIPE OR OPEN DRAIN
TP TANGENT POINT
CH CHAINAGE
PSM
STREET SIGN
DRAINAGE PIT No.
TBM
EX FENCE
EX WALL OR BUILDING

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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MITCHELL SHIRE COUNCIL
ARROWSMITH AND LITHGOW ST, BEVERIDGE
TIMBARRA ESTATE - STAGE 5
TEMPORARY RETARDING BASINS - DETAIL PLAN, DRAINAGE LONG SECTIONS, DETAILS AND PIT SCHEDULE

DRAWING No.	VERSION
5R16	A
REFERENCE	
23017E/5	
SHEET	
16 OF 17	

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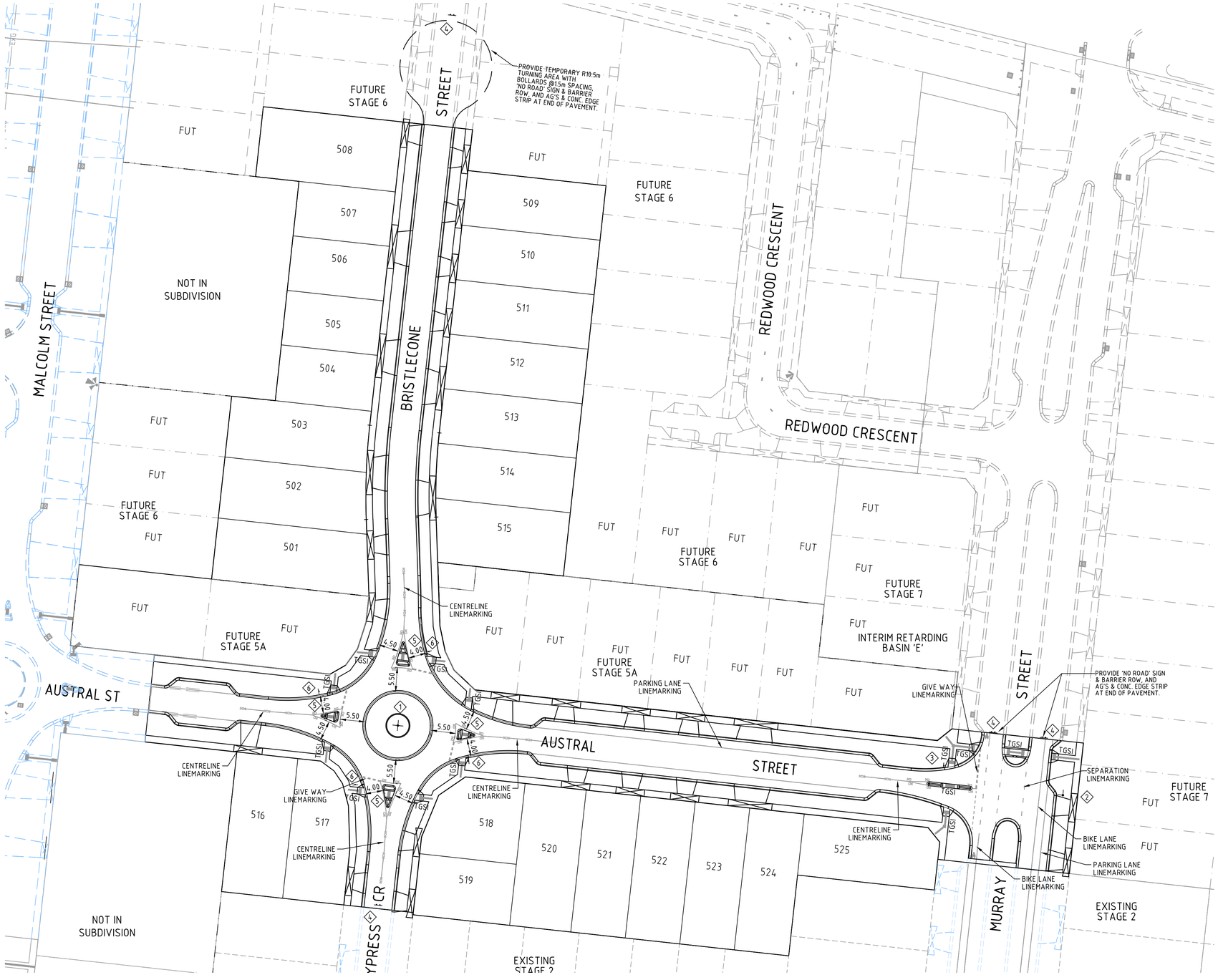
N

MGA94 ZONE 55



0 5 10 20

Scale 1:500 @ A1

LEGEND

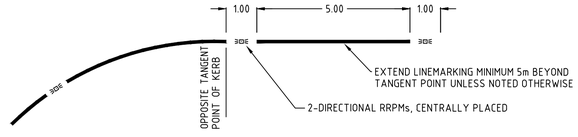
- PROPOSED LINEMARKING
- EXISTING LINEMARKING
- 3IDE — RRPM (RAISED REFLECTIVE PAVEMENT MARKER)
- (1) — PROPOSED SIGN No. - REFER SIGNAGE LEGEND
- TGSI — TACTILE GROUND SURFACE INDICATORS (TGSI) - REFER NOTES BELOW.
  - TGSI LATERAL MARKER
  - TGSI DIRECTIONAL MARKER
  - TGSI WARNING MARKER

NOTES

1. ALL DIMENSIONS REFER TO INVERT OF KERB UNLESS NOTED OTHERWISE.
2. SIGNS, LINEMARKING AND RRPMs SHALL BE INSTALLED IN ACCORDANCE WITH AS1742 "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" UNLESS INDICATED OTHERWISE.
3. TGSIs SHALL BE INSTALLED IN ACCORDANCE WITH DDA STANDARD (REFER VICROADS STF 2031), UNLESS NOTED OTHERWISE.
4. PLANS SHALL BE READ IN CONJUNCTION WITH SHEET 2 AND M.O.C.S. AS-CONSTRUCTED DATA FOR SERVICES.

TRAFFIC SIGNAGE

1	STREET NAME SIGN (2 DIRECTIONS)	
2	STREET NAME SIGN (4 DIRECTIONS)	
3	GIVE WAY	R1-2A
4	"ROAD CLOSED" & OBSTRUCTION MARKER	G9-20, D4-5
5	KEEP LEFT	R2-3L
6	ROUNDABOUT	R1-3



CENTRELINE LINEMARKING -TYPICAL DETAIL

NOT TO SCALE

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A	PRELIMINARY ISSUE	13.10.22	JS

LEGEND

- DRAIN, PROPERTY INLET & PIT
- EX DRAIN & PIT
- HOUSE DRAIN
- S — SEWER AND MAINTENANCE HOLE
- ExS — EX SEWER AND MAINTENANCE HOLE
- W — WATER MAIN
- ExW — EX WATER MAIN, VALVE & HYDRANT
- G — GAS MAIN
- ExG — EX GAS MAIN, VALVE
- T — TELSTRA SERVICES & PITS
- ExT — EX TELSTRA SERVICES & PITS
- RW — RECYCLED WATER
- ExRW — EX RECYCLED WATER
- E — ELECTRICAL U.G. SERVICES
- ExE — EX ELECTRICAL U.G. SERVICES
- E — ELECTRICAL SERVICE & PIT
- LIGHT, POLE, PIT — EX ELECTRICAL ASSETS
- EX ELECTRICAL OVERHEADS
- GW — GAS & WATER CONDUITS
- TOP OF BATTER
- TOE OF BATTER
- EX FENCE
- EX WALL OR BUILDING

F FINISHED SURFACE AFTER CUTTING OR FILLING
Fb TOP OF PROPOSED BATTER
P PROPOSED PAVEMENT OR FOOTPATH SURFACE
IL EXISTING OR PROPOSED INVERT LEVEL OF PIPE OR OPEN DRAIN
TP TANGENT POINT
CH CHAINAGE
PSM
STREET SIGN
DRAINAGE PIT No.
TBM

DRAWN BY	H.MARES	DESIGNED BY	J.SIGABALAVU
MELWAY	685 H2	CHECKED BY	-
DATUM	AHD	AUTHORISED BY	-

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SIGNAGE AND LINEMARKING PLAN

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5R17	A
REFERENCE	
23017E/5	
SHEET	
17 OF 17	

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